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The Report of "G"

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F O R E W O R D .

I.

I have investigated microscopically 21 cases of glanders-disease.

These case are divided into 2 groups :

- a) Percutaneous infection and
- b) Pernal infection.

Percutaneous infection.	16 cases.	No. 16. 50. 85. 146. 152. 167. 180. 190. 167.193.205. 207. 221. 222. 225. 254.
Pernal infection.	5 cases. *	No.176.178.229. 727. 731.

* Some of them, not sure.

I have classified the course of the disease into 4 stages:

- 1. Acute stage. 0 ----- 14 days.
- 2. Subacute stage. 14 days -----28 days.
- 3. Subchronic stage. 28 days ----- 7 weeks.
- 4. Rather chronic stage. 7 weeks ----- several months.

	Acute stage	Subacute stage	Subchronic stage	Rather chronic stage
Percutaneous infection.	5 cases	7 cases	3	1
Pernal infection.	3 cases	0	0	2

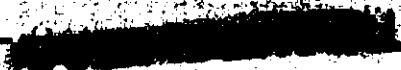
(a). Acute stage :

(-) Some cases (8 cases of 21 cases) died in acute stage with some septicemic-toxic symptoms and some adjacent septicemic changes of organs. Not yet accompanied with remarkable organic changes.

Case.	Days of course.	Toxic-septicemic changes of organs.
1. 224.	4 days.	Traumatic wounds. Congestion in Stomach, Pancreas and Supra-renal glands. Traumatic Wounds. Congestion in Large-Intestine and Pancreas. Interstitial edema of Kidney. Reactive congestion of lung (slight diffuse Alveolitis).

(*) These toxic changes are emphasized in some cases with more intense exudative changes, due to metastasis in various organs.

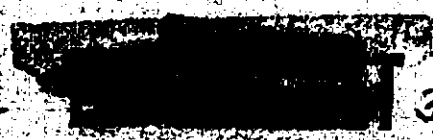
Case	Days of course	Metastatic changes traumatic wounds
3. 180.	12 days.	traumatic wounds. Congestion in stomach. Congestion of lung and pleura, accompanied with some bacterial dissemination. Miliary glanders-Knots in exudative form, accompanied with some parenchymatous degeneration in LIVER. Metastatic acute Thyreoiditis :



4. 190. 10 days. traumatic wounds.
 Interstitial edema of heart, accompanied with some mesenchymal reactions.
 Interstitial edema of kidney, accompanied with some round cell accumulation.
 Slight diffuse Alveolitis of lung, accompanied with slightly hyperplasiad alveolar epitheliums.
 Miliary glanders-Knots in liver, accompanied with some parenchymatous degeneration.

5. 16. 13 days. traumatic wounds.
 Some localised hemorrhages and edema of heart.
 Slight diffuse Alveolitis of lung, accompanied with some bacterial dissemination.
 Miliary glanders-Knots of liver, accompanied with intense parenchymatous dgeneration.
 Intense parenchymatous degeneration of pancreas.
 Metastatic Tonsillitis acuta.

6. 176. 10 days. Intense congestion of heart, accompanied with some mesenchymal reaction.
 Intense congestion of large-intestine.
 Congestion of lung (slight Alveolitis).
 Hepatitis serosa of liver, accompanied with some hemorrhages in central zone of acinus.
 Nephrosis, accompanied with considerable interstitial edema and some intense bionecrotic changes of tubular epitheliums.



[REDACTED]

[REDACTED]

7. 176. 12 days. Some localised hemorrhages in subendocardial tissues.
Slight Alveolitis and some pulmonal congestion.
Some hemorrhages in pancreas.
Some edema of kidney, accompanied with some round cell accumulation.
Intense fatty degeneration of liver.

(.). In one case, develop these exudative changes to the most intense.

8. 229. 9 days. Intense edema and some mesenchymal reactions of heart.
Exudative-hemorrhagic Bronchitis and Peribronchitis.
Multifocal acinous-lobular pneumonia and Pleuritis sero-fibrinosa.
Intense edema and some round cell accumulation of kidney.
Intense congestion and some hemorrhages in stomach.
Intense parenchymatous degeneration of liver.
Moderate parenchymatous degeneration and some round cell accumulation in supra-renal gland.
Parenchymatous degeneration and some subepithelial edema, in pituitary body.

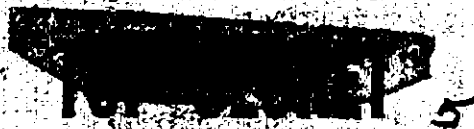
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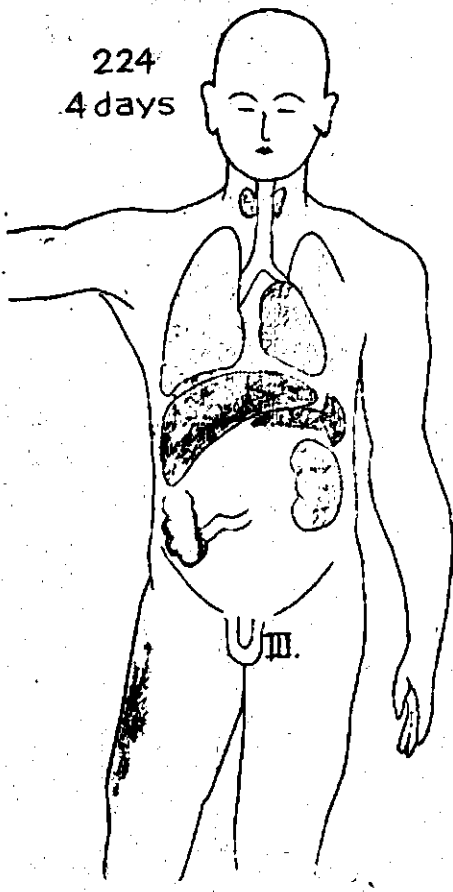
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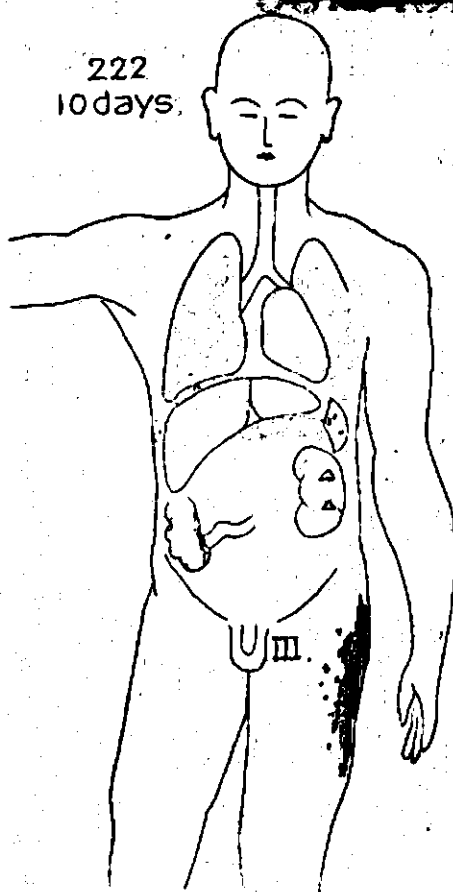
Therefore the main pathological changes in acute stage are as following.



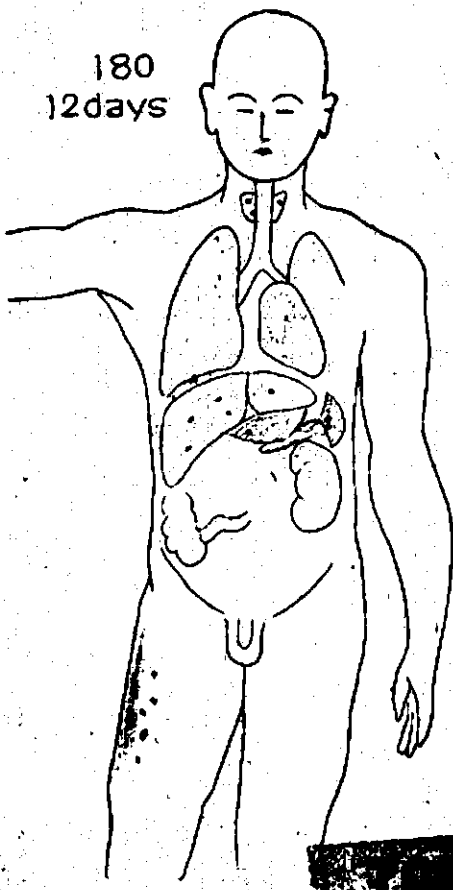
224
4 days



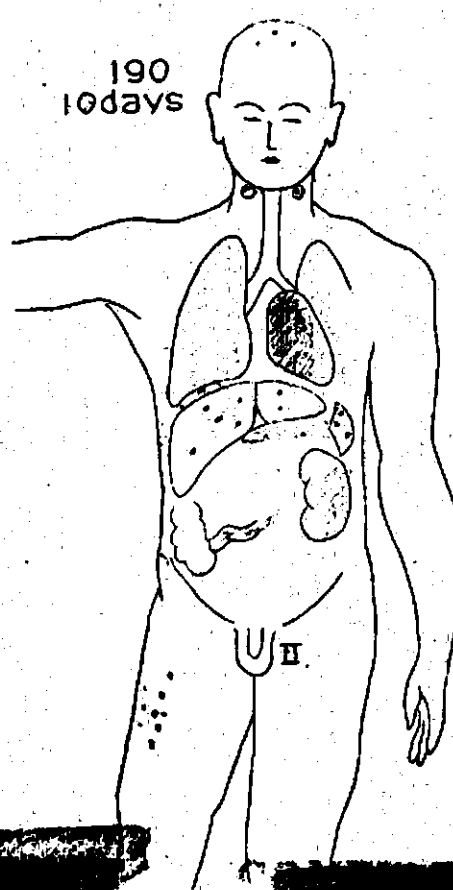
222
10 days



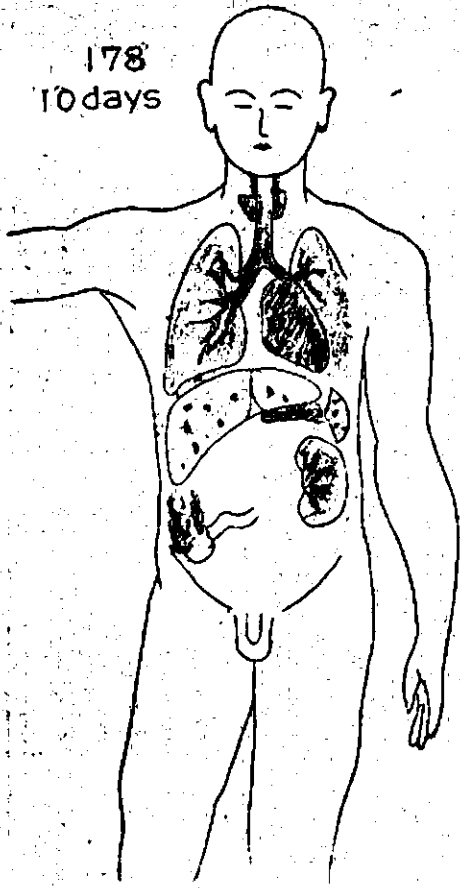
180
12 days



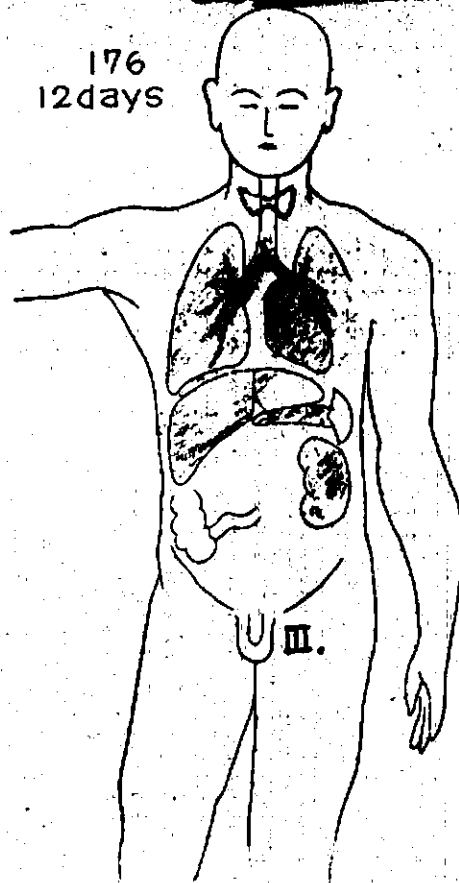
190
10 days



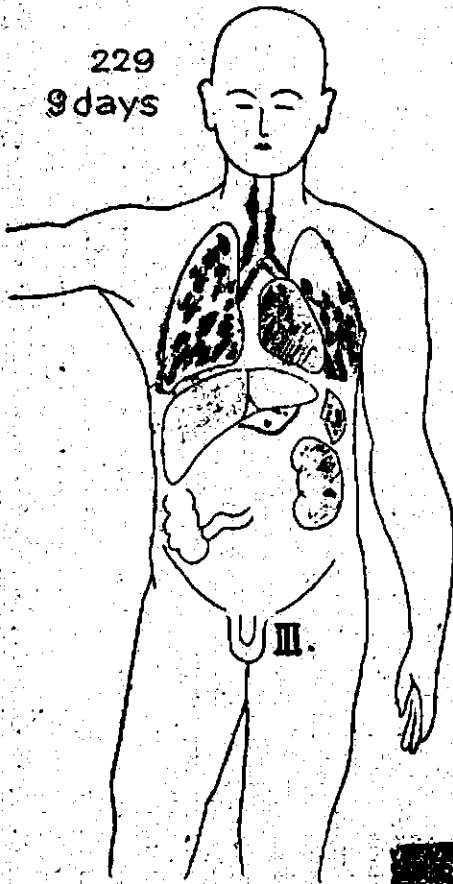
178
10 days



176
12 days



229
9 days



CO [REDACTED]

[REDACTED]

[REDACTED]

(b). Subacute stage:

After about 2 weeks occurred significant and severe symptoms of general metastasis, esp. some pneumonic changes which were frequently accompanied with reactive exudative-hemorrhagic pleuritis.

case Days of course. Changes, due to general metastasis.

1. 167. 15 days.

Lung: Metastatic Endarteritis necroticans and multiple acino-lobular pneumonia.
Reactive hemorrhagic-fibrinous pleuritis.

Liver: Intense fatty degeneration.

Some parenchymatous degeneration:
Interstitial edema of kidney.
Some localised hemorrhages in subepicardial tissues of heart.

2. 50. 16 days.

Lung: Multiple military glanders-knots, in intense exudative-hemorrhagic form.
Reactive hemorrhagic-fibrinous pleuritis.

Other metastatic changes :
Metastatic Tonsillitis acuta in the beginning stage.
Heart with some mesenchymal reactions.

3. 254. 20 days.

Lung: Multiple acino-lobular, hemorrhagic-leucocytic pneumonia.
Subpleural glanders-knots (in exudative form), (Correspond to the primary seat of tuberculous affection).
Reactive hemorrhagic pleuritis.

Liver ; Multiple millet-corn large glanders-knots (in somewhat proliferative form) and intense fatty degeneration.

Lymph-node, (Peribronchial) : Lymphadenitis, due to glanders-infection.

Small-Intestine : Metastatic glanders-knots in subserous tissues.

[REDACTED] 8 [REDACTED]

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Some other parenchymatous degeneration:
Heart with intense interstitial edema.
Kidney with intense interstitial edema.
Supra-renal glands with some hemorrhages.
Pancreas with our so-called serous apoplexy
of islands (intense exudation in islands).

4. 85. 21 days.

Lung: Multiple military glanders-knots in intense exudative form.

Liver: Intense fatty degeneration and multiple military glanders-knots.

Some other parenchymatous degeneration.
Heart with some rheumatoid-knots (in exudative form), due to glanders-infection.
Nephrosis I or III at some places.

5. 207. 18 days.

Lung: Metastatic Endoarteritis necroticans.
Multiple glanders-knots with a light perifocal reactions.
Multiple acino-lobular pneumonia.
Multiple subpleural glanders-knots.

Liver: Some parenchymatous degeneration and some hemorrhages in the central zone of acinus.

Some other parenchymatous degeneration :
Kidney with slight nephrosis and some interstitial edema.
Heart with some interstitial edema.
Thyroid in follicular collapse.

6. 221. 24 days.

Lung: Multiple acino-lobular pneumonia with severe exudative-hemorrhagic perifocal reactions.

Reactive exudative-fibrinous pleuritis.

Liver: Multiple military glanders-knots and some parenchymatous degeneration.

Some other parenchymatous degeneration:
Heart with intense interstitial edema, etc.

7. 193. 25 days.

Lung: Metastatic Endoarteritis necroticans.
Multiple submiliary glanders-knots.
Bacterial dissemination.

Liver : Multiple submiliary glanders-knots (in

[REDACTED]

[REDACTED]

rather proliferative form).

Some other parenchymatous degeneration :
Heart with some mesenchymal reactions.
Glomerulo-nephrosis with some our so-called,
polar edema.
Thyroids in follicular collapse.

In this subacute stage, occurred some intense exudative changes, especially in lung and liver, on the ground of general metastasis.

The later two and Nound, infected with glanders. (accompanied with metastatic muscular abscesses) caused serious clinical symptoms-which cause the death.

METASTASIS in LUNG : in all 7 cases.

a) Necrotic decay of blood vessel wall, due to metastatic Thromboendocarditis necroticans and Pneumonic changes of perivascular pulmonal tissues.

b) Invasion to alveolar capillaries.

Miliary glanders-Knots formation.

(mainly exudative form in this stage).

Multifocal (exudative-hemorrhagic) acino-lobular pneumonia.

[REDACTED]

[REDACTED]

[REDACTED]

Accompanied with exudative-hemorrhagic pleuritis.

(in 4 cases of 7 cases).

METASTASIS in LIVER :

Multiple military glanders-Knots formation.

(in 6 cases of 7 cases).

or caused intense parenchymatous degeneration.

METASTASIS in CUTANEOUS or MUSCULAR TISSUES :

Metastatic pustulosis, accompanied with some erythema, pustules, phlegmons or some muscular abscesses or suppurative Periostitis.

Mutiple pustulosis head and face. 1 case.

Abscess in knee-joint. 1 case.

Continual propagation of muscular abscesses, from traumatic wounds. 5 case.

METASTASIS in OTHER PARENCHYMATOUS ORGANS.

Metatasis in small-intestine.

Typical glanders-knots formation in subserous tissues. 1 case.

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~~CONFIDENTIAL~~ Sometimes accompanied with severe parenchymatous degeneration.

Serous apoplexy of islands. I case.

Glomerulo-nephrosis with intense polar edema.

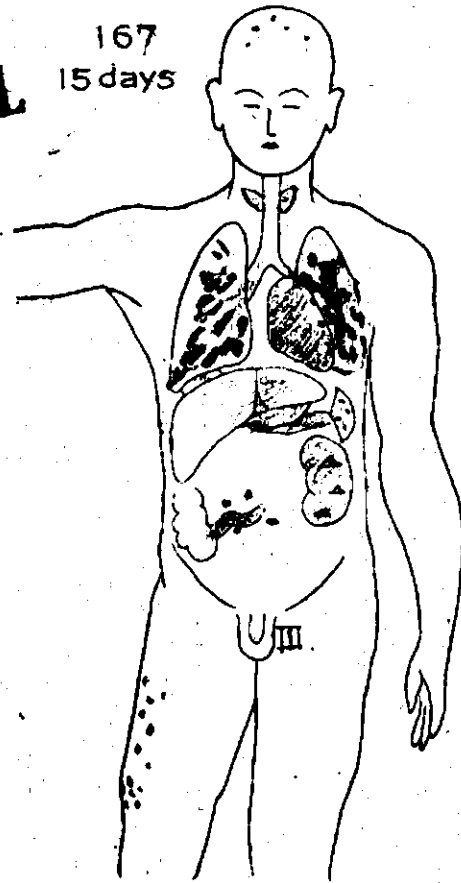
I case.

[REDACTED]

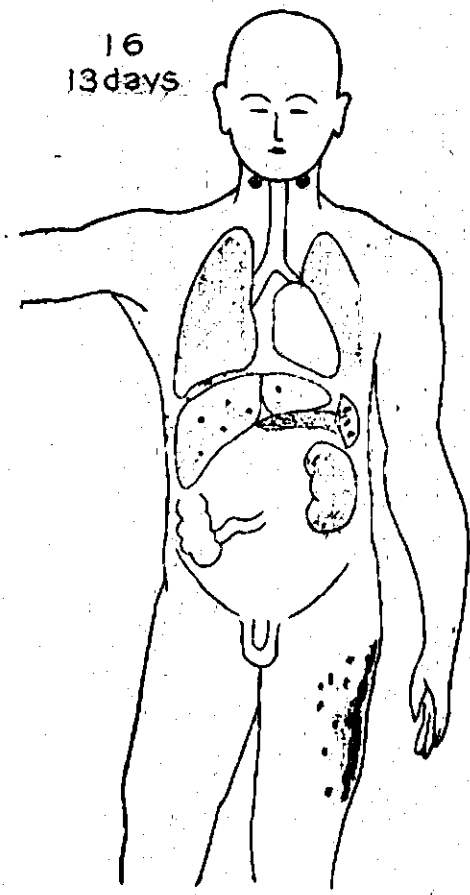
Sketchy record of general metastasis in subacute stage.

[REDACTED]

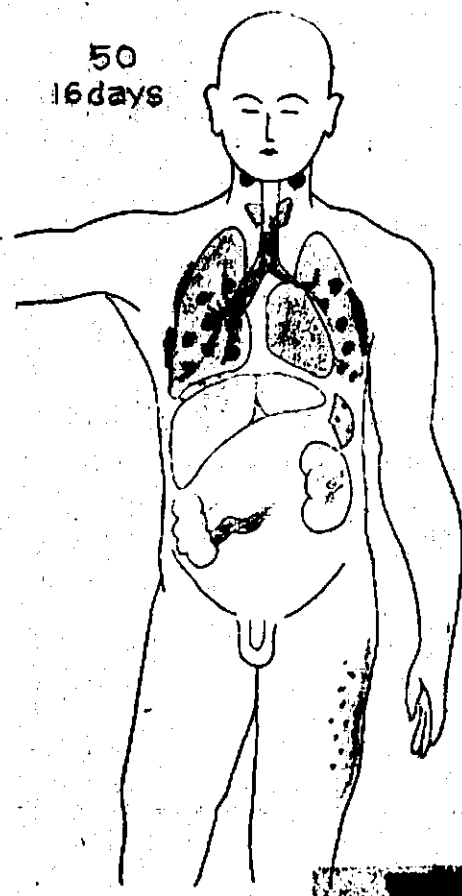
167
15 days



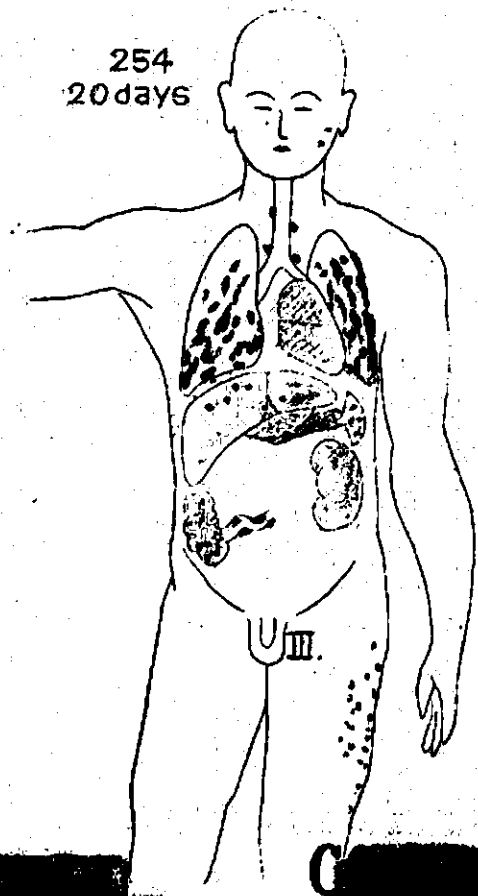
16
13 days



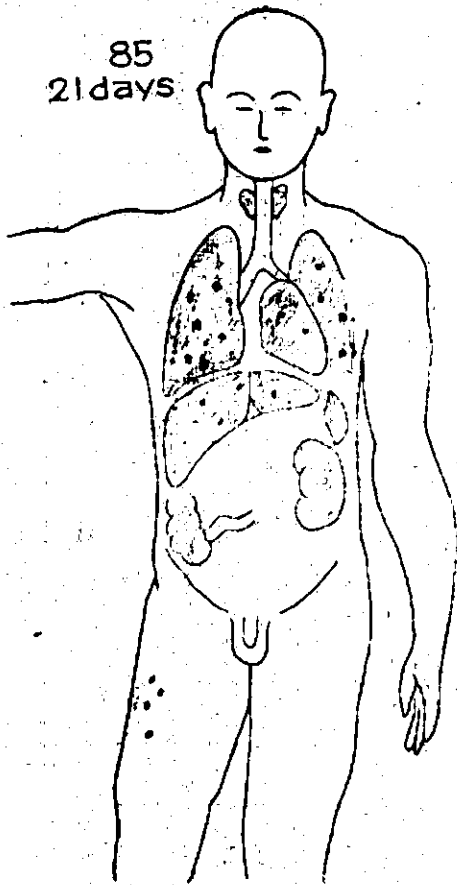
50
16 days



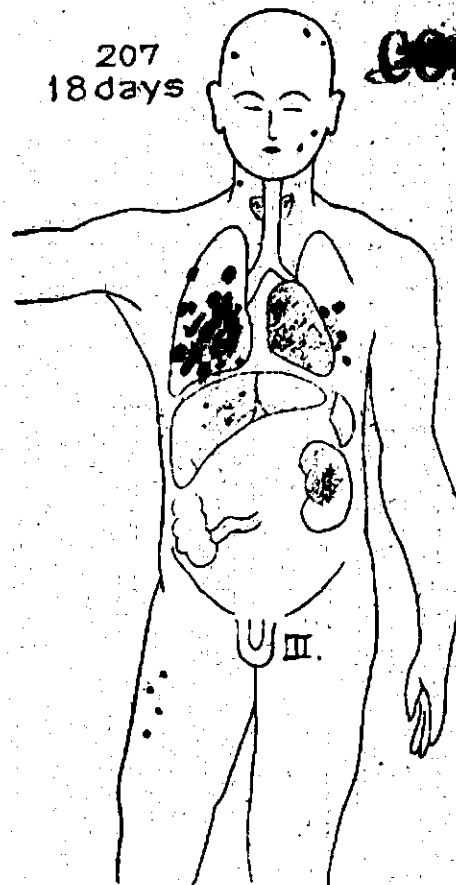
254
20 days



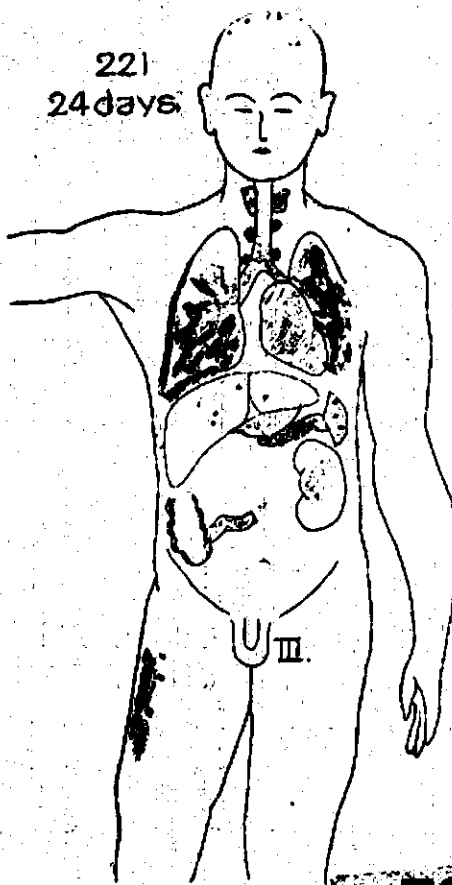
85
21 days



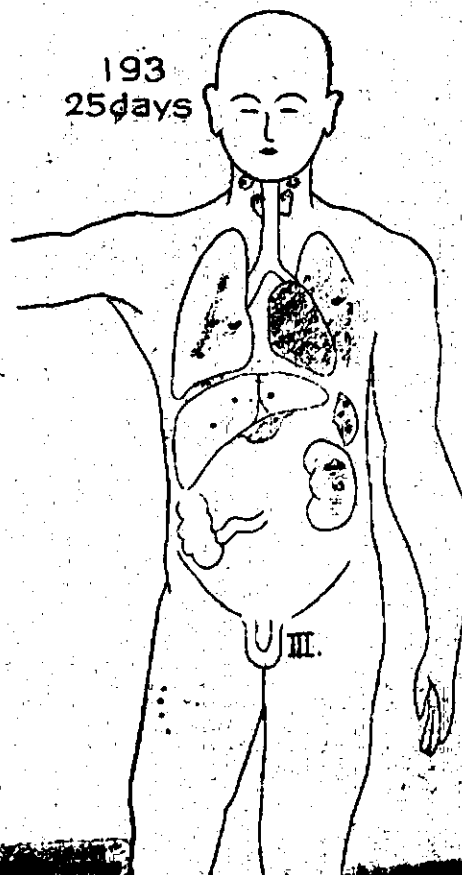
207
18 days



221
24 days



193
25 days



(c). Subchronic stage : 4---7 weeks. 3 cases.

The main pathological changes in this stage are also intense exudative changes :

1. Secondary pneumonia : metastatic Endoarteritis necroticans and following hemorrhagic-leucocytic pneumonia. Sometimes accompanied with reactive pleuritis (exudative-fibrinous) pleuritis.
2. Hepatitis serosa and multiple glanders-knots in rather exudative forms.
3. Infected wounds, muscular abscesses and metastatic pustulosis.
4. Some exudative changes of some other parenchymatous organs. Sometimes accompanied with some mesenchymal reaction, due to rather chronic course.

Case.	Days of course.	Main pathological changes
-------	-----------------	---------------------------

1. 205.	37 days.	Lung: metastatic Endoarteritis necroticans Multiple supermiliary glanders-knots, with intense perifocal reactions.
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Liver: Multiple submiliary glanders-knots.

Other parenchymatous organs :

Glomeulo-nephrosis with intense interstitial edema
and some round cell accumulation.

Pancreas with lymphocytes-accumulation.

Supra-renal glands with some lymphocytes accumula-
tion.

Mascular abscess and metastatic pustulosis.

2. 146.	39 days.	Lung: Lobular pneumonia in hemorrhagic-leucocytic form.
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Some bacterial dissemination.

Reactive sero-fibrinous pleuritis.

Liver: Hepatitis serosa , with intense fatty
degeneration.

Some other parenchymatous organs :

Glomerulo-nephrosis with multiple round cell accumulation.

Pancreas with some parenchymatous degeneration and slight hemorrhages.

Intestine with some submucous congestion.

Meninges with congestion and slight hemorrhages.

Supra renal glands with some round cell accumulation and parenchymatous degeneration.

Multiple pustulosis.

3. 152. 46 days.

Lung: Moderate diffuse Alveolitis.

Liver: Hepatitis serosa, with intense fatty degeneration and some hemorrhages in central zone of acinuses.

Other parenchymatous organs.

Heart with some localised hemorrhages in subepicardial tissues.

Kidney (Glomerulo-nephrosis) with intense interstitial edema.

Meninges with slight hemorrhages.

No remarkable changes else.

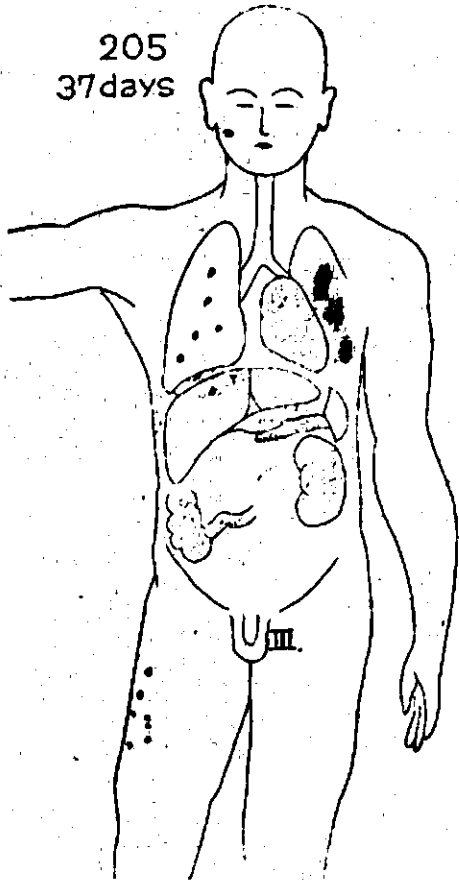
Muscular tissues with abscess and traumatic wounds.

I case with continual propagation of muscular abscesses and metastatic pustulosis in face.

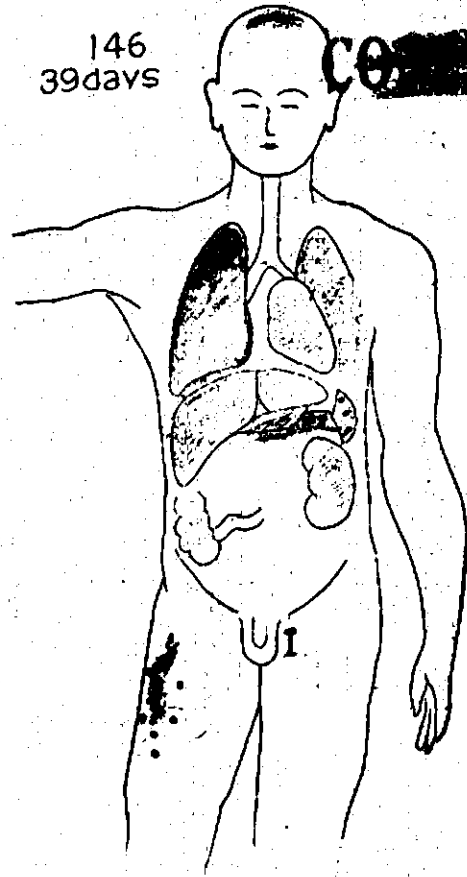
I case with multiple pustulosis (in face, head, knee-joint, some cutaneous tissues and some periosteal tissues, esp. at upper arm.)

I case with intense multiple, continual metastatic muscular abscesses and diffuse abscesses.

205
37 days

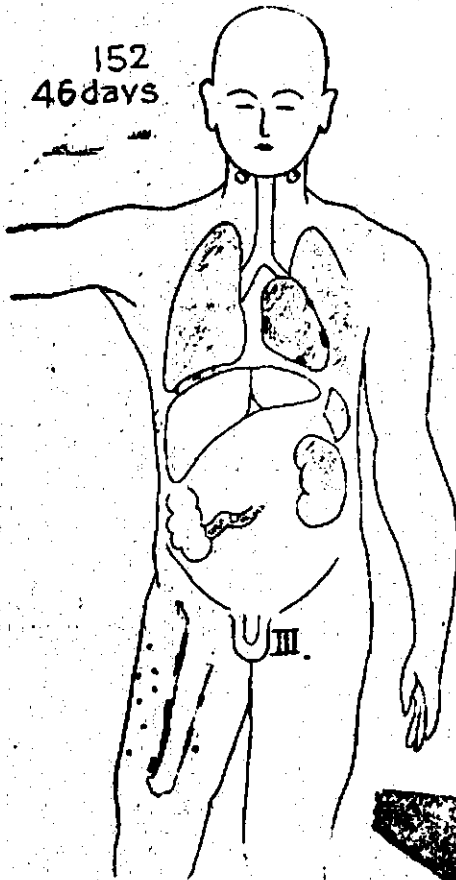


146
39 days



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152
46 days



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(d). Rather chronic stage :

In this stage I have recognized many metastatic changes, due to general metastasis : in lung, lung, liver, intestines, lymph-nodes, kidney muscles and thyreoid and etc.

Case.	Days of course.	Main pathological changes.
I. 256.	45 days.	<p>Lung: Metastatic Endoarteritis necroticans. Multiple military glanders - Knots. Multifocal hemorrhagic-leucocytic, acinolobular pneumonia. Remarkable papillar increase of alveolar or bronchiolar epitheliums at the interalveolar portion of lung.</p> <p>Liver: Hepatitis serosa with some hemorrhages in the central zone of acinuses.</p> <p>Other parenchymatous organs : Glomerulo-nephrosis with some polar edema and some proliferative changes at [^]-areas. Supra-renal glands with a light some hemorrhages. Pituitary body with a light hemorrhages in posterior lobe. Lymphadenitis caseosa, due to perhaps glanders-infection.</p> <p>Muscular abscesses.</p>
2. 727.	105 days.	<p>Lung: Metastatic Endoarteritis necroticans. Lobular pneumonia in intense hemorrhagic-exudative form. At some places with caverns formation.</p> <p>Liver; Hepatitis serosa , with multiple military glanders-knots.</p> <p>Some other parenchymatous organs : Small intestine with reactive hyperplasia of</p>

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lymphatic nodulus (containing some giant cells, due to chronic course).
Kidney with moderate Glomerulo-nephrosis with some polar edema and interstitial edema.
Supra-renal glands with some hemorrhages and some round cell accumulations.
Thyroids in follicular collapse.

No remarkable changes at cutaneous tissues, any where.
3.731. ca. 3 months.

Lung : Acino-lobular pneumonia with intense perifocal reactions.

Liver: Hepatitis serosa with multiple military millet-corn large knots and remarkably increased Kupfer's cells.

Some other organs:

Heart with intense interstitial edema and some slight hemorrhages in subepicardial tissues.
Kidney with considerable Glomerulo-nephrosis, accompanied with some polar edema and some remarkable round cell accumulation at periglomerular portions (glanders-knots).
Thyreoditix subacuta with some metastatic glanders-knots.
Supra-renal glands with intense degeneration and some hemorrhages.

~~cutaneous tissues.~~
No remarkable changes at cutaneous tissues.

In this stage, I have recognized many metastatic changes, due to general metastasis ; in lung, liver, intestine, lymph-nod, spleen, kidney, muscles, or thyreoid.

These organic changes are classified into 2 types : a) exudative form and b) rather proliferative form.

[REDACTED]

a). Exudative form: [REDACTED]

The exudative changes, the main pathological reactions in subacute or subchronic stage, develops in this stage to the most intense.

For examples :

.) I have investigated multiple acino-lobular pneumonia with intense hemorrhagic exudative perifocal reactions in I case and furthermore some cavern formation in I case. The perifocal tissues of these caverns are intensely exudative.

.) I have investigated in some other parenchymatous organs, also intense exudative changes : slight hemorrhages and some exudation.

b) Rather proliferative form.

On the other hand, these exudative changes are accompanied in some cases with some proliferative reactions.

For examples :

.) I have recognised remarkable (papillar) hyperplasia of alveolar or bronchiolar epitheliums, especially at the intercalary portions of lung, due to rather chronic course.

[REDACTED]

[REDACTED]

.) In liver : also, hyperplasiad some histiocytic cells (Kupfer's cells), as significant proliferative reactions.

Multiple miliary
glanders-knots.

Exudative form.

↓
Rather proliferative form,
accompanied with hyperplasia of Kupfer's
cells.

[REDACTED]

[REDACTED]

•) In some other parenchymatous organs : these exudative changes are accompanied with some mesenchymal reactions.

Consequently , both (exudative and proliferative) changes in every organs in every organs are as following.

In short short, both exudative and proliferative changes in every organs are as following :

Acute course.

Rather chronic course.

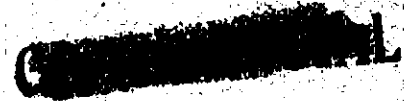
Exudative changes.

Rather proliferative changes.

Heart.	Interstitial edema. Slight hemorrhages (in subendocardial tissues). Miliary glanders-knots (in subendocardial tissues).	Some mesenchymal reaction. Rheumatoid-knots formation. fresh exudative ----- (obsolete form).
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Lung.	Metastatic Endoarteriitis. Miliary glanders knots in exudative form. Multiple acinous or acino-lobular pneumonia with intense exudative perifocal reactions. Reactive (exudative-fibrinous) Pleuritis.	Miliary glanders knots in proliferative form. Some organising process. Papillar increase of alveolar epitheliums, as proliferative reaction.
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Liver.	Exudation in Disse's spaces, (Hepatitis serosa). Hemorrhages in central zone. Miliary glanders-knots in exudative form.	Miliary glanders-knot in proliferative form. Accompanied with remarkable hyperplasia of Kupfer's cells.
--------	--	--



Kidney. **Glomerulo-nephrosis.** **Glomerulo-nephrosis.**

with somcalled polar edema. Slight proliferative reactions at polar portions (so-called Δ-areas).

Some mesenchymal reaction
Military glanders-knots formation.

Intestine. **Submucous congestion.**

Miliary glanders-knots in exudative form. Hyperplasia of reticulum cells. accompanied with some giant cells formation.

Supra-renal-gland.

Epinephritis serosa (with some edema).
Hemorrhages.
Some round cell accumulation.

Pancreas. **Degeneration.** **Some round cells accumulation.**

Perivascular edema and hemorrhages.
Serous apoplexy of islands.

Pituitary body. **Pituitaritis serosa.**

Slight hemorrhages in posterior lobe.

Meninges. **Some congestion and some slight hemorrhages.**

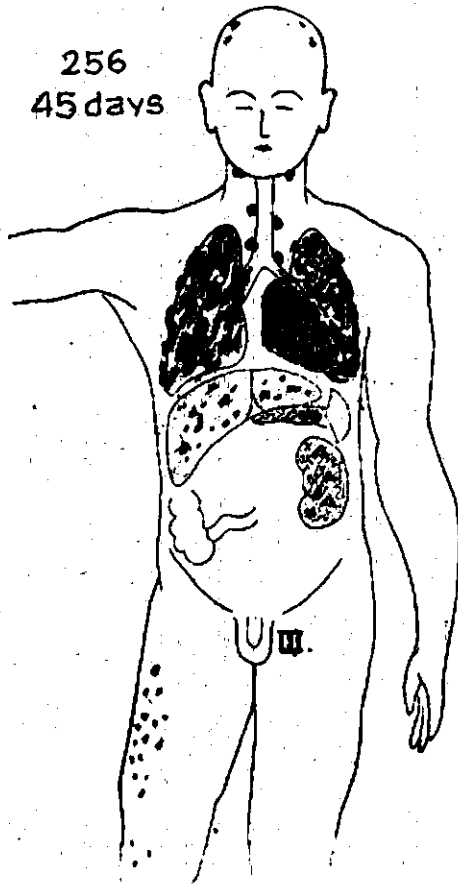
Muscles. **Abscess.** **Hyperplasia of myoblasts, histiocytes and fibroblasts.**

Spleen. **Angio-folliculitis haemorrhagico-exudativa.** **Hyperplasia of reticulo-endothelial system.**

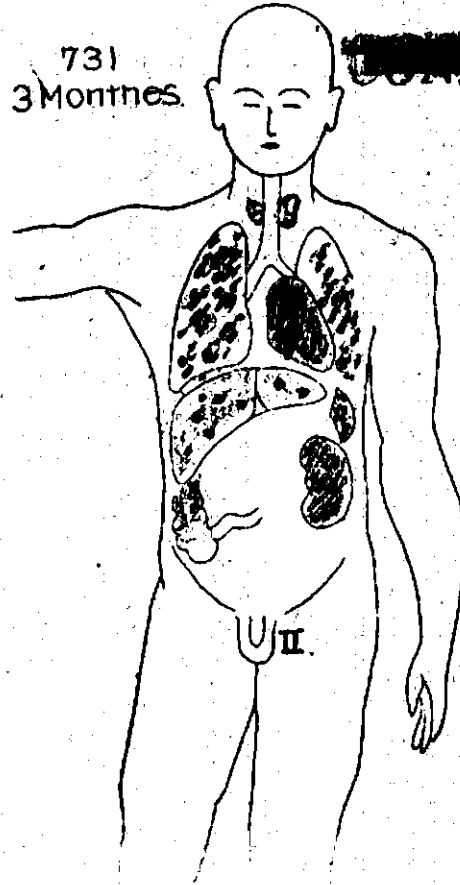
Fasciculitis hemorrhagico-exudativa.



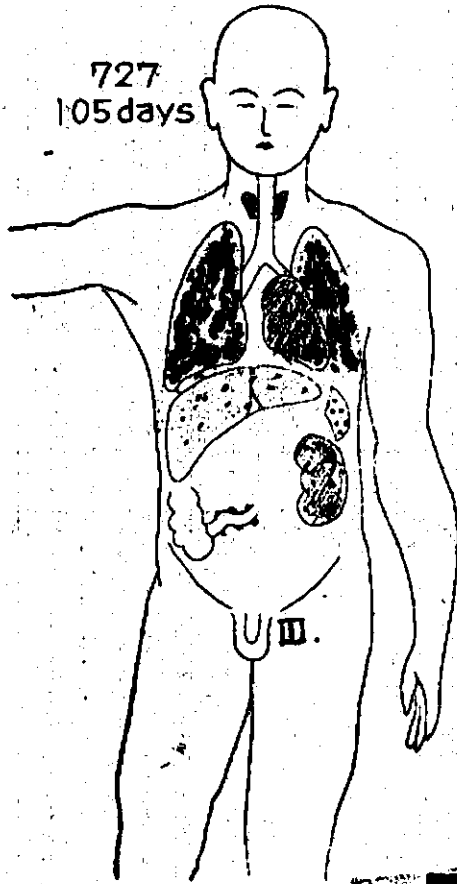
256
45 days



731
3 Months



727
105 days



16.

Ma. 25 years old. ↑

Days of
course.

13 days.

Infect.-
mode.

Per-cutaneous infection.

Skin.

Diffuse intense exudative-hemorrhagic-leucocytic infiltration in subcutaneous tissues.

Muscle.

Multiple small abscesses.

Heart.

Degeneration myocardii calised hemorrhages in subepicardial tissues.

Aorta.

No remarkable changes.

Tonsil.

Tonsillitis acuta.

Reactive hyperplasia of germinative centres with some localised necrosis.

Intense congestion and some leucocytes-dissemination in submucous tissues.

Pharynx.

No remarkable changes, macroscopically.

Bronchus.

Bronchiolitis catarrhalis lavis.

Lung.

I. spp.

Stasis et edema pulmonum.

Slight diffuse alveolitis with some bacterial dissemination.

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I. inf. Stasis et edema pulmonum: Slight diffuse Alveolitis.
r. sup. Stasis et edema pulmonum. Slight diffuse Alveolitis.

Liver. Hepatitis serosa (II). with multiple miliary necrosis.

Stomach. No remarkable changes.

Small-
Intestine. Atrophic glandular cells.

Large- Intest. Almost normal.

Kidney. Slight Glomerulo-nephrosis.
Nephrosis I., with some interstitial edema.

Spleen. Spleno-Folliculitis haemorrhagico-exsudativa.
Spleno-Fasciculitis exsudativa.

Lymph-node.

Mesenterial. No remarkable changes.

Peri-bronchial. Medullary congestion.

Panceas. Parenchymatous degeneration with hyaline-droplets
formation in some acinuses.
Vacuolar degeneration of island-cells.

Supra-renal. Considerable atrophia and degeneration of parenchyma-
tous cells. Considerable edema and slight round-cell
-accumulation in cortical tissues.

Thyreoid. In statical state with slight congestion.

Pituitary body. missed.

Testicle. missed.

Brain. -

50.

Ca. 30 years old. ↑

Days of course. 16 days.

Infect.- mode. Per-cutaneous infection.

Skin. Phlegmonous cell infiltration in subcutaneous tissues.

Muscle Multiple small abscesses.

Heart. Degeneration myocardii. Slight mesenchymal reaction with some histiocytes, some Myocytes and some Monocytes.

Aorta. No remarkable changes.

Tonsil. Tonsillitis acuta (partialis).

Remarkable congestion in follicular tissues.

Some localised necrosis (with plenty of bacterial masses, plenty of leucocytes) in germinative centres.

Pharynx. Slight congestion.

Bronchus. Bronchitis catarrhalis with some hemorrhagic masses.

Lung. (r. and l) Severe diffuse Alveolitis.

Multiple military glanders-knots with severe hemorrhagic perifocal reactions.

Pleuritis hemorrhagico-fibrinosa duplex.

[REDACTED]

[REDACTED]

Liver. Hepatitis serosa

Stomach. Considerable congestion in mucous tissues.

Small-Intest. Enteritis catarrhalis.

Large-Intest. No remarkable changes.

Slight Glomerulo-nephrosis.

Kidney. Nephrosis I (at some places III), with some interstitial edema.

Spleen. Angio-Folliculitis haemorrhagico-exsudativa.
Spleno-Fasciculitis exsudativa.

Lymph-nods. Considerable follicular congestion
peribronchial,

Pancreas. -

Supra-renal. -

Thyreoid. In slight activated state with slight congestion, slight edema and slight degeneration of parenchym. cells.

Pituitary body. -

Testicles. -

Brain.



CONFIDENTIAL

ca 25 years old.



Days of course. 21 days.

Infect.-mode. Per-cutaneous infection.

Skin. Remarkable diffuse congestion and perivascular round cell-accumulation in subcutaneous tissues.

Muscle. Some small abscesses.

Heart. Degeneratio myocardi.
Some rhoumatoids-knots, (due to glanders-infection.)

Aorta. No remarkable changes.

Tonsil. No remarkable changes, macroscopically.

Pharynx. "

Bronchus. "

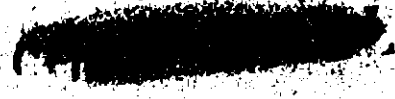
Lang.(right and left) Severe diffuse Alveolitis.
Multiple miliary glanders-Rnots with intense exudative perifocal reactions.

Liver. Hepatitis sweosa I-II. with intense fatty degeneration at some places and multiple miliary knots (lymphocytic).

Stomach. No remarkable changes.

Small-Intestine. Almost normal.

Large-Intestine Slight catarrh



Kidney. Slight Glomerulo-nephrosis (glomeruli in degenerative form).

Nephrosis I (II or III at some places).

Interstitial edema and some calcinated masses in tubular spaces.

Spleen. Angio-Folliculitis exsudativa.

Spleno-Fasciculitis exsudativa.

Lymph-node.

Mesenterial. No remarkable changes.

Peribronchial. Lymphadenitis caseosa tuberculosa.

Pancreas. -

Supra-renal. -

Thyreoid. In slight activated state with slight degeneration of follicular epitheliums.

Pituitary body. -

Testicles. -

Brain. -

ca. 35 years old. ♂

Days of course 39 days.

Infect.-mode. Per-cutaneous infection.

Skin. Multiple pea-large abscesses with hemorrhages.

Muscle. Multiple millet-corn large or military abscesses,
(leucocytic-hemorrhagic).

Heart. Degeneratio myocardi.

Aorta. No remarkable changes.

Tonsil. No remarkable changes (macroscopically).

Bronchus. Bronchiolitis catarrhalis gravis.

Pharynx. No remarkable changes, macroscopically.

Lung.

(I, sup). Stasis et edema pulmonum.

Considerable diffuse Alveolitis.

(I, inf). Stasis et edema pulmonum.

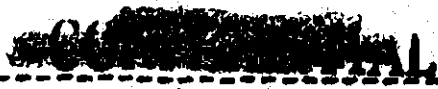
Considerable diffuse Alveolitis, with some bacterial
dissemination.

(r, apex). Lobular pneumonia.

Catarrhalic-exudative, sometimes hemorrhagic-leucocytic.

(r, median). Pleuritis sero-fibrinosa with some pleural congestion.
Stasis et edema pulmonum. Slight diffuse Alveolitis.

(r, inf). Stasis et edema pulmonum.



Liver. Hepatitis serosa, with intense fatty degeneration at some places.

Stomach. Gastritis catarrhalis hypertrophicans.

Small-Intest. Almost normal with slight congestion in submucous tissues.

Large-Intest. Considerable edema in mucous tissues and considerable congestion in submucous tissues.

Kidney. Slight Glomerulo-nephrosis (glomeruli in degenerative form).
Nephrosis I (II or III at some places), with multiple round-cell-infiltration and intense edema.

Spleen. Angio-Folliculitis haemorrhagico-exsudative.
Spleno-Fasciculitis exsudativa.

Lymph-nods.

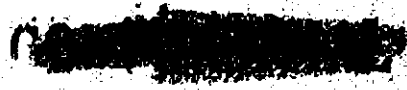
Peribronchial. Considerable follicular congestion.

Pancreas. Considerable congestion and slight hemorrhages.
Parenchymatous degeneration and some hyaline degeneration of islet-cells.

Supra-renal. Some parenchymatous degeneration with some perivascular round-cell-accumulation.
Hyaline masses in medullary tissues.

Thyroid. -
Pituitary body. -

Testicles Atrophia testis



Brain.

Considerable congestion, slight diffuse hemorrhages and some round-cell-infiltration in meningeal tissues.

Considerable congestion and some edema of brain.

ca. 40 years old. ↑

Days of course. 46 days.

Infect.-mode. Per-cutaneous.

 Skin. Multiple pea-large abscesses in Str. reticularis.

Muscle. Multiple small abscesses.

(with periostitis purulenta)

 Heart. Degeneratio myocardii.

Some localised hemorrhages in subepicardial tissues.

Some Myocytes.

Aorta. No remarkable changes.

 Tonsil. Reactive hypertrophia with some reactive hyperplasia
 of germinative centres.

Pharynx. No remarkable changes, macroscopically.

Bronchus. No remarkable changes.

Lung. Edema et stasis pulmonum.

(right and
 left) Considerable diffuse Alveolitis.

 Liver. Hepatitis serosa I-II. with intense fatty degeneration at
 some places and some hemorrhages in central zone of
 acinuses.

Stomach. Almost normal with some atrophic glandular cells.

[REDACTED]

Small-Intestine. Enteritis catarrhalis levis. [REDACTED]

Large-intestine. Almost normal with slight hyperplasia of lymphatic follicles.

Kidney. Slight or considerable Glomerulo-nephrosis (glomeruli in degenerative form).
Nephrosis I (at some places II^I), with intense interstitial edema.

Spleen. Angio-Folliculitis exsudativa.
Spleno-Fasciculitis exsudativa.

Lymph-node. No remarkable changes, macroscopically.

Pancreas. -

Supra-renal. Atrophia and some parenchymatous degeneration.

Thyreoid. -

Pituitary body. Considerable congestion and considerable degeneration of parenchymatous cells (esp. basophilic cells).

Testicle. Atrophia testis II.

Brain. Meningeal congestion and slight hemorrhages.
Considerable congestion in brain.

167.

ca 40 years old. ♂

Days of course. 15 days.

Infect-mode. Per-cutaneous infection.

Skin. Multiple pea-large abscesses in Str. subpapillaris.

Muscle. Multiple small abscesses.
(with joint abscesses).

Heart. Degenerative myocardii levis. Some localised hemorrhages
in subepicardial tissues. Some myocytes.

Aorta. No remarkable changes.

Tonsil. No remarkable changes (macroscopically).

Bronchus. Bronchitis catarrhalis levis.

Lung. Slight diffuse Alveolitis.

(l, inf) Pleuritis haemorrhagico-fibrinosa.

(r). Hemorrhagic-pneumonia (acino-lobular), organised
slightly with remarkable hyperplasiated alveolar
epitheliums.

(l. sup). Endarteriitis et Endarteriolitis necroticans with
multiple acino-lobular pneumonia.

Pleuritis fibrosa and pleural congestion.

[REDACTED]

[REDACTED]

Liver. Hepatitis serosa II. with some intense fatty degeneration.

Stomach. Gastritis catarrhalis hypertrophicans.
some considerable congestion.

Small-Intestine Enteritis catarrhalis.

Large-Intestine. Almost normal.

Kidney. Considerable Glomerulo-nephrosis (some glomeruli in degenerative form) with considerable polar edema.
Nephrosis I, with intense interstitial edema and some round cell accumulation.

Spleen. Angio-Folliculitis exsudativa,
 Spleno-Fasciculitis haemorrhagico-exsudativa.

Lymph-node.
(mesenterial) Slight catarrh.

Pancreas: Parenchymatous degeneration and some hyaline degeneration or hyaline-droplets formation in some sinuses.

Supra-renal. Considerable congestion and some hemorrhages in cortical tissues and intense round cell accumulation.

Thyroid. Struma colloides proliferans.

Pituitary body. Slight congestion and considerable edema.
 Considerable degeneration of parenchymatous cells (esp. basophilic cells).

Testicle. Atrophia testis III.

[REDACTED]

[REDACTED]

-----;

Brain.

Considerable congestion, some hemorrhages and slight
perivascular round cell infiltration in meninges.

Considerable congestion of brain.

176.

ca 38 years old.

Days of course. 12 days.

Infect.-mode. Per-nasal infection ?

Skin. No remarkable changes.

Muscle. No remarkable changes.

Heart. Parenchymatous degeneration. Some localised hemorrhages
in epicardial tissues and some myocytes.

Aorta- No remarkable changes.

Tonsil. No remarkable changes (macroscopically):

Pharynx. No remarkable changes (macroscopically).

Bronchus. Bronchitis catarrhalis.

Lung. (r, l). Slight pulmonal congestion (Slight diffuse Alveolitis).

Liver. Hepatitis serosa I. with intense fatty degeneration.

Stomach. Intense congestion and some eosinophilic leucocytes
in capillaries.

Small-Intestine. Almost normal.

Large-Intestine. Almost normal.

[REDACTED]

[REDACTED]

Kidney. Considerable Glomerulo-nephrosis (some glomeruli in degenerative form).
Nephrosis I, with intense edema and some round cell accumulation.

Prostata. Some round cell infiltration with some corpora amylacea.

Spleen. Missed.

Lymph-node. No remarkable changes (macroscopically).

Pancreas. Considerable congestion and some hemorrhages .
Hyaline-degeneration or some hyaline droplets formation in some acinuses.
Intense congestion and some parenchymatous degeneration of island-cells.

Supra-renal. Slight parenchymatous degeneration and some hypertrophic cell-groups in cortical tissues.

Thyroid. In slight activated state with slight congestion slight hyperplasia of follicular epitheliums.

Pituitary body. -

Testicle. Atrophia testis III.

Brain. -

[REDACTED]

L78.

[REDACTED]

Days of course. 10 days.

Infect.-mode. Per-nasal infection?

Skin. No remarkable changes, according to autopsy-records.

Muscle. No remarkable changes, according to autopsy-records.

Heart. Degeneratio myocardi., with intense congestion
and some histiocytes around capillaries.

Aorta. No remarkable changes (macroscopically).

Tonsil. No remarkable changes (macroscopically).

Pharynx. Intense edema in submucous tissues and hyalinisation of
T.muscularis (intense edema).

Bronchus. Bronchitis catarrhalis.

Lung. Slight pulmonal congesti on. (slight daffuse Alveolitis).

Liver. Hepatitis serosa I-II, with some hemorrhages in central
zone.

Stomach. No remarkable changes (macroscopically).

Small-Intestine. No remarkable changes (macroscopically).

Large-Intestine. Remarkable atrophia of glandular cells with considerable
congestion in submucous tissues.

Kidney. Slight Glomerulo-nephrosis (some glomeruli in dege-
nerative form) and Nephrosi-I (some tubular epithelium)

[REDACTED]

[REDACTED]

42

[REDACTED]

with vacuolar degeneration). [REDACTED]

Considerable interstitial edema with some localised
necrotic places.

Spleen. Angio-Folliculitis haemorrhagico exsudativa.
 Spleno-Fasciculitis haemorrhagico exsudativa.

Lymph-node. No remarkable changes.

Pancreas. Congestion and considerable parenchymatous
 degeneration.

Atrophic island-cells.

Supra-renal. Some parenchymatous degeneration with some hemorrhages
 in Z. glomerulosa.

Thyreoid. Follicular collapse.

Pituitary body. -

Testicle. -

Brain. Considerable congestion and some round cell
 accumulation in meninges.

Considerable congestion of brain.

[REDACTED]

[REDACTED]

180.

ca 28 years old.

Days of course. 18 days.

Infect.-mode. Per-cutaneous.

Skin. Phlegmons in cutaneous or subcutaneous tissues.

Muscle. Multiple miliary or millet-corn large abscesses
(hemorrhagic-leucocytic).

Heart. Slight parenchymatous degeneration, venous congestion
and some Myocytes.

Aorta. No remarkable changes (macroscopically).

Tonsil. No remarkable changes (macroscopically).

Pharynx. Slight round cell accumulation.

Bronchus. No significant changes.

Lung. Considerable pulmonal congestion and edema.

(r, and l.). Bacterial accumulation at some places and plerural
congestion.

Liver. Hepatitis serosa II-III, with miliary multiple necro-
sia (lymphocytes-accumulation).

Stomach. Slight congestion and considerable catarrh.

Small-Intest. Almost normal.

Large-Intest. Almost normal (macroscopically). [REDACTED]

[REDACTED] 44

[REDACTED]

[REDACTED]

Kidney. Slight Glomerulo-nephrosis (some glomeruli in degenerative form) and Nephrosis I.

Spleen. Angio-Folliculitis exsudativa.
Spleno-Fasciculitis exsudativa.

Lymph-node. No remarkable changes (macroscopically).

Pancreas. Considerable congestion and edema.
Some parenchymatous degeneration.

Supra-renal. Atrophia and some degeneration of cortical cells.
Considerable edema and some round cell accumulation.

Thyroid. Subacute Thyreoiditis with some congestion, hemorrhages, some round cell accumulation and some parenchymatous degeneration.

Pituitary body. Considerable congestion and edema.
Slight cloudy degeneration of parenchym. cells (esp. basophilic cells).

Testicle.. -

Brains -

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ca. 30 years old. ♂

Days of course. 10 days.

Infect.-mode. Per-cutaneous infection.

Skin. Multiple perivascular leucocytes-accumulation in subcutaneous tissues and some small abscesses formation.

Muscle. Multiple small abscesses.

Heart. Intense parenchymatous degeneration and intense atrophica.

Intense edema and some histiocytes-accumulation.

Aorta. No remarkable changes (macroscopically).

Tonsil. Almost normal with slight superficial ulcers.

Pharynx. Edema and some round cell accumulation.

Bronchus. No significant changes.
Intensne congestion.

Lung. Slight diffuse Alveolitis, with slight hyperplasia of alveolar epheliums.

Liver. Hepatitis serosa II. with multiple submiliary lymphocytic accumulation in acinuses.

Stomach. Considerable catarrh and slight hyperplasia of lymphatic nodulus.

Small-Intest. Enteritis catarrhalis.



Large-Intest. Almost normal.



Kidney. Slight Glomerulo-nephrosis (some glomeruli in degenerative form) and Nephrosis I, with some interstitial edema and some round cell accumulation.

Seminal vesicles. No remarkable changes

Spleen. Angio-folliculitis haemorrhagico-exsudativa. Spleno-Fasciculitis. exsudativa.

Lymph-node. No remarkable changes macroscopically.

Pancreas. Venous congestion, considerable atrophis and degeneration.

Supra-renal. Parenchymatous degeneration, with some hemorrhages in Z. reticularis.

Hyaline-droplets formation in medullary tissues.

Thyroid. In atrophic state.

Pituitary body. -

Testicle. Atrophis testis II.

Brain. Considerable congestion, slight hemorrhages and some perivascular round cell accumulation in meninges.

193.

ca. 35 years old. ♂

Days of course. 25 days.

Infect.-mode. Per-cutaneous infection.

Skin. Considerable diffuse congestion and perivascular lymphocytes-accumulation in subcutaneous tissues.

Muscle. Some small abscesses.

Heart. Intense atrophie and degeneration of parenchym. cells.
Plenty of Myocytes.

Aorta. No remarkable changes (macroscopically).

Tonsil. Tonsillitis simplex. Reactive hyperplasia of lymphatic follicles.

Pharynx. Some round cell infiltration in submucous tissues.

Bronchus. No significant changes.

Lung. (r). Endoarteriitis and Endoarteriolis necroticans.

Sumiliary glanders-knots in catchment areas.

Intense pulmonal edema and pleural congestion.

(1). Considerable diffuse Alveolitis.

Edema et stasis pulmonum and some bacterial dissemination.

Considerable pleural congestion.

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Liver. Hepatitis serosa (I). with multiple submiliary necrosis
, (In proliferative form).

Stomach., Slight catarrh.

Small-Intest. Almost normal.

Large-Intest. Almost normal, macroscopically.

Kidney. Considerable Glomerulo-nephrosis (some glomeruli in
degenerative form) with some polar edema.
Nephrosis I, (some places III), with intense
interstitial edema.

Spleen. Angio-Folliculitis haemorrhagico exsudativa
Spleno-Fasciculitis. haemorrhagico-exsudativa.

Lymph-node. No remarkable changes.

Pancreas. -

Supra-renal. -

Thyreoid. Follicular collapse.

Pituitary body. -

Testicle. Atrophia testis III.

Brain. -

205.

Ca. 23 Years old ♂.

Days of course. 37 days.

Infect, -mode. Per-cutaneous infection.

Skin. Multiple pea-large abscesses in subcutaneous tissues.

Muscle. Multiple millet-cornlarge or miliary abscesses.

Heart. Degeneratio myocardii levis and some Myocytes.

Aorta. No remarkable changes, macroscopically.

Tonsil. No remarkable changes, macroscopically.

Pharynx. No remarkable changes, macroscopically.

Bronchus. No significant changes.

Lung. (r). Endoarteriolitis necroticans.

Multiple supermiliary glanders-knots (without remarkable perifocal changes).

Slight pleural congestion.

(l). Endoarteriolitis necroticans.

Multiple supermiliary glanders-knots with intense hemorrhagic perifocal reactions.

Stasis et edema pulm.

Liver Hepatitis serosa I. with multiple submiliary lymphocytic acculumentation.

TOP SECRET

[REDACTED]

Small-Intestine.

Enteritis catarrhalis levis. [REDACTED]

Large-Intestine.

Slight catarrh.

Kidney:

Considerable Glomeulo-nephrosis (glomeruli in considerable congestion).

Nephrosis I, with considerable interstitial edema and considerable round cell infiltration.

Spleen.

Missed.

Lymph-node.

No remarkable changes.

Pancreas.

Considerable congestion and some edema. Some lymphocytes accumulation at perivascular portions.

Considerable parenchymatous degeneration.

Supra-renal.

Intense parenchyatous degneration with some round cell accumulation in cortical tissues.

Some Places with hypertrophic cell groups.

Some round cell acumulation in medullary tissues.

Thyreoid.

Pituitary body.

Testicle.

Atrophia testis III.

Brain.

207.

ca 30 years old.



Days of course

18 days.

Infect.-mode.

Per-cutaneous infection.

Skin.

Considerable diffuse congestion and perivascular lymphocytes-accumulation in subcutaneous tissues.

Muscles.

Some small abscesses.

Heart.

Degeneratio myocardii and intense interstitial edema.

Aorta.

No remarkable changes, macroscopically.

Tonsil.

No remarkable changes, macroscopically.

Pharynx.

No remarkable changes, macroscopically.

Bronchus.

No significant changes.

Lung. (r).

Endoarteriolitis necroticans.

Subpleural glanders-knots and multiple glanders-knots, with slight hemorrhagic perifocal reactions.

Some acino-lobular pneumonia.

(1).

Subpleural supermiliary glanders-knots, with slight perifocal hyperemia.

No remarkable changes in other general pulmonal tissues.

[REDACTED]

[REDACTED]

Liver. Hepatitis serosa II. with some hemorrhages in central zone of acinuses.

Stomach. No remarkable changes, macroscopically.

Small-Intestine. Almost normal with slight congestion.

Large-Intestine. Almost normal.

Kidney. Slight Glomerulo-nephrosis (some glomeruli in degenerative form).

Nephrosis I with considerable interstitial edema.

Spleen. Missed.

Lymph.-node. No remarkable changes.

Pancreas. -

Supra-renal. -

Thyroid. Follicular collapse.

Pituitary body. -

Testicle. Atrophia testis III.

Brian. No significant changes.

[REDACTED]

[REDACTED]

221.

Young man.

Days of course.

24 days.

Infect.-mode.

Per-cutaneous infection.

Skin.

Multiple intense perivascular leucocytes-emigration.
Intense diffuse hemorrhages in subcutaneous tissues.

Muscle.

Some small abscesses.

Heart.

Degenratio et atrophia myocardii levis.
intense interstitial edema.

Aorta.

No remarkable changes.

Tonsil.

No remarkable changes.

Pharynx.

No remarkable changes.

Bronchus.

Broncho-Bronchiolitis catarrhalis levis.

Lung. (r).

Pleure-pneumonia.

Lobular pneumonia et Pleuritis ero-fibrinosa.

(1).

Acinous or acino-lobular pneumonia,

with severe exudative-hemorrhagic perifocal
reactions.

(1).

Acinous or acino-lobular pneumonia with
multiple glanders-knots.

[REDACTED]

Liver.m Hepatitis serosa I. with ~~secondary~~ necrosis (lymphocytic histiocytic). Some lymphocytes-accumulation in Glissons capsules.

Stomach. Slight catarrh and slight congestion, slight hyperplasia of lymphatic nodulus.

Small-Intestine. Enteritis catarrhalis with reactive hyperplasia of germinative centres of lymphatic nodulus.

Large-Intestine. Atrophic mucous tissues. Intense congestion in submucous tissues.

Kidney. Slight Glomerulo-nephrosis (some glomeruli in degenerative form).
Nephrosis I.

Spleen. Angio-Folliculitis haemorrhagico-exsudativa.
m Spleno-Fasciculitis haemorrhagico-exsudativa.

Lymph. node. Slight catarrh.

(Peribronchial). Pericapsular slight hemorrhages.
Catarrh and considerable congestion (with some eosinophilic leucocytes in capillaries) in follicular tissues.

Pancreas. Congestion. Degeneration and atrophia of parenchymatous cells.
Intense congestion and intense peripolar edema of island.

Supra-renal. Considerable congestion and some round cell accumulation.

[REDACTED] **[REDACTED]**

[REDACTED]

Considerable parenchymatous degeneration.

Thyroid.

Subacute disfiguring of thyroids.

Some places with disfiguring.

Some places with hyperfunction, due to
Basedow's disease.

Pituitary body.

Considerable congestion with some leucocytes in
capillaries.

Slight parenchymatous degeneration.

Testicle.

Atrophia testis III.

Brain.

Some cogestion, slight round cell accumulation and
slight hemorrhages in meninges.

Urinary bladder.

No remarkable changes.

222.

ca. 25 years old. ♂

Days of course. 10 days.

Infect-mode. Per-cutaneous infection.

Skin. Diffuse intense serous-exudative-hemorrhagic
-leucocytic infiltration in subcutaneous tissues.

Muscle. Multiple small abscesses.

Heart. Degeneratio myocardii.

Aorta. No remarkable changes, macroscopically.

Tonsil. No remarkable changes, macroscopically.

Pharynx. No remarkable changes, macroscopically.

Bronchus. No significant changes.

Lung.(r and l). Stasis pulmonum levis.

Liver. Hepatitis serosa I - II .

Stomach. Almost normal, macroscopically.

Small-Intestine Almost normal, macroscopically.

Large-intestine Atrophic glandular cells.
Remarkable congestion in submucous tissues.

[REDACTED]

[REDACTED]

Kidney. Considerable Glomeulo-nephrosis (some glomeruli in acute exudation and congestion), with some polar changes. Nephrosis I with considerable interstitial edema.

Spleen. Angio-folliculitis haemorrhagico-exsudativa- Spleno-Fasciculitis haemorrhagico-exsudativa.

lymph-node. No remarkable changes, macroscopically.

Pancreas. Cloudy swelling or vacuolar degeneration. Considerable congestion and slight hemorrhages.

Supra-renal. Considerable edema in cortical tissues. Some round cell infiltration in medullary tissue. Some hypertrophic cells-groups.

Thyroid. -

Pituitary body. Considerable congestion and slight edema in subendothelial layers of acinuses. Slight degeneration of parenchymatous cells. Slight congestion and some hemorrhages in posterior lobe.

Testicle. Atrophia testis III.

Spermatic cord. Considerable congestion, slight hemorrhages and slight round cell infiltration.

Brain. -

[REDACTED]

33 years old. ♂

Days of course. 4 days.

Infect.-mode. Per-cutaneous infection.

Skin. Small spotted wound. Diffuse intense serous-exsudative-hemorrhagic-leucocytic infiltration in subcutaneous tissues.

Muscle. Phlegmonous infiltration of wandering cells.

Heart. Atrophia et degeneratio myocardii.
Intense edema.

Aorta. No remarkable changes.

Tonsil. No remarkable changes, macroscopically.

Pharynx. m No remarkable changes, macroscopically.

Bronchus. No significant changes.

Lung. Stasis et edema pulmonum levis.

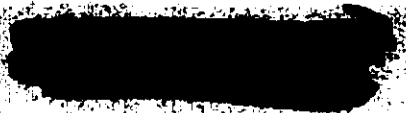
(r, l) Slight diffuse Alveolitis.

Liver. Hepatitis serosa III-IV.

Stomach. Considerable congestion in mucous tissues.

Small-Intest. No remarkable changes, macroscopically.

Large-Intest. Remarkable atrophia of glandular cells.



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Kidney. Considerable Glomerulo-nephrosis (some glomeruli in degenerative form).
Nephrosis I.

Spleen Angio-Bolliculitis haemorrhagico-exsudativa.
 Spleno-Fascilcuitis. haemorrhagico-exsudativa.

Lymph-node. No remarkable changes. macroscopically.

Pancreas. Considerable degeneration and atrophia of parenchymatous cells. Considerable congestion.

 Considerable congestion and atrophia of island-cells.

Supra-renal. Atrophia, degeneration and dissociation of parenchymatous cells.

 Slight hemorrhages, intense edema and some round cell accumulation in cortical tissues.

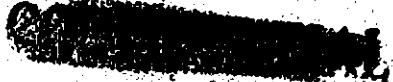
Thyreoid. In slight activated state (
 Slight congestion, edema and slight degeneration of follicular epitheliums.

Pituitary body. Considerable congestion and some edema in subendothelial layers of acinuses.

 Cloudy swelling of parenchymatous cells (esp. basophilic cells).

Testicle. Atrophia testis III.

Brain.



229.

ca. 32. years old.

Days of course.

9 days.

Infect.-mode.

Per-cutaneous infection.

Skin.

No remarkable changes.

Muscle.

No remarkable changes.

Heart.

Atrophia and degeneratio myocardii, with intense edema. Some Myocytes.

Aorta.

No remarkable changes.

Tonsil.

No remarkable changes, macroscopically.

Pharynx.

No remarkable changes, macroscopically.

Bronchus.

Exudative-hemorrhagic inflammation of bronchus and peri-bronchial tissues.

Lung. (r).

Multiple acinous or acino-lobular pneumonia, with severe exudative perifocal changes.

(1, inf).

Multiple acino-lobular pneumonia with glanders-knots.

Pleuritis sero-fibrinosa.

(1, sup).

Stasis et edema pulmonum.

Subpleural congestion.

Liver.

Hepatitis serosa I.

Stomach.

Considerable congestion with slight hemorrhages in

[REDACTED]

mucous tissues.

Small-Intestine. Almost normal.

Large-Intestine. Almost normal.

[REDACTED]

Kidney. Considerable Glomerulo-nephrosis with some polar changes.

Nephrosis I (or II at some places), with considerable interstitial edema.

Spleen. Angio-Folliculitis haemorrhagico-exsudativa. et necroticans .

Spleno-Fasciulitis haemorrhagico-exsudativa et necroticans.

Lymph-node. Missed. (Not described in autopsy-records).

Pancreas. -

Supr-renal. Parenchymatous degeneration.
Some round cell accumulation and submiliary lymphocytic accumulation at some places.

Thyroid. -

Pituitary body. Intense congestion and subendothelial edema.
Considerable parenchymatous degeneration.

Testicle. Atrophia testis III.

Brain. No remarkable changes.

ca. 27 years old.

Days of course. 20 days.

Infect.-mode. Per-cutaneous infection.

Skin. Multiple millet-corn large abscess or phlegmonous cell infiltration.

Muscle. Multiple poppy seed-large abscess.

Heart. Degeneratio et atrophia myocardii.

Intense interstitial edema and slight Myocytes.

Aorta. No remarkable changes, macroscopically.

Tonsil. No remarkable changes, macroscopically.

Pharynx. No remarkable changes, macroscopically.

Bronchus. No significant changes.

Lung. (r, sup.). Multiple miliary glanders-knots with slight proliferat. perifocal changes.

(1). Acino-lobular hemorrhagic-leucocytic pneumonia with intense exudative-hemorrhagic perifocal reactions and multiple supermiliary glanders-knots.

Pleuritistis haemorrhagica.

Remarkable perivascular round cell accumulation.

(r, inf.). Acino-lobular pneumonia.

Subpleural glanders-knots.

[REDACTED]

Liver. Hepatitis serosa with some [REDACTED] degenerat.
at some places and millet-corn large glanders-Knots in
proliferative form.

Stomach. Gastritis catarrhalis hypertrophicans.

Small-Intestine. Atrophic glandular cells.

Some submiliary glanders-knots (with epitheloid cells,
in proliferative form) in subserous tissues.

Large-Intestine. Colitis catarrhalis levis.

Spleen. Angio-folliculitis haemorrhagico-exsudativa.

Spleno-fascioulitis exsudativa.

Lymph-node. Multiple submiliary caseous places in germinative
(Peribronchial) centres, (due to glanders-infection?).

Slight catarrh of sinus.

Kidney. Considerable Glomerulo-nephrosis (glomeruli in exudative
form), with considerable polar edema.

Nephrosis I, with considerable interstitial edema and
some round cell infiltration.

Pancreas. Congestion. Atrophia and degeneration of parenchymatous
cells.

Serous apoplexie of islands.

Supra-renal.

Atrophia and some parenchymatous degeneration of cortical
tissues (esp. in Z. glomerulosa).

Considerable oedema and slight haemorrhages, [REDACTED]

[REDACTED]

64

[REDACTED]

Thyreoid. -

Pituitary body. -

Testicle. Atrophia III.

Brain. No remarkable changes.

856.

25 years old. ♂

Days of course 45 days.

Infect.-mode. Per-cutaneous infection.

Skin. Multiple small abscesses with hemorrhages.

Muscle. Multiple super-miliary or mollet-corn large abscesses.
(leucocytio-hemorrhagic).

Heart. Degeneratio myocardii and Cicatrix myocardii.
Some Myocytes.

Aorta. No remarkable changes, macroscopically.

Tonsil. Tonsillitis acuta levis.
Remarkable edematous swelling, some leucocytes-
accumulation, some localised necrosis and intense
reduction of follicular tissues.
Considerable congestion and slight diffuse hemorrhages
in submucous tissues.

Pharynx. No remarkable changes, macroscopically.

Bronchus. Bronchiolitis catarrhalis, with some decayed masses
as bronchiolar contents.

Lung. 1). Multiple miliary glanders-knots in hemorrhagic-
leucocytic form, with severe exudative perifocal
changes.
2). Multiple lobulo-acinous pneumonia.
Pleuritis hemorrhagico-exsudativa.
3). Multiple Endoarteriolitis necroticans.
Multiple acino-lobular pneumonia in hemorrhagic-
exudative form.

[REDACTED]

4). Endoarteriolitis necroticans.

Acinous hemorrhagic pneumonia.

5). Endoarteriolitis necroticans.

Subpleural acino-lobular pneumonia, with some exudative-hemorrhagic perifocal reactions. Papillar increase of bronchiolar and alveolar epitheliums at intercalary portion of lung.

6). Papillar increase of alveolar or bronchiolar epitheliums at intercalary portion of lung.

Liver.

Hepatitis serosa II-III. with some hemorrhages in central zone of acinuses and multiple military necrosis (leucocytic-lymphocytic).

Stomach.

Slight catarrh.

Small-Intestine.

No remarkable changes, macroscopically.

Large-Intestine.

No remarkable changes, macroscopically.

Kidney.

Considerable Glomerulo-nephrosis (some glomeruli in rather proliferative form), with some polar edema.

Considerable hyperplasia of adventitial cells of v. afferens.

Nephrosis I.



CONFIDENTIAL

Spleen.

missed.

Lymph-node.

Mesenterial : No remarkable changes, with some medullary congestion.

Peribronchial : Lymphadenitis caseosa, due to Glanders -infection.

Multiple submiliary caseous places in germinative centres.

Considerable congestion and slight hemorrhages in follicular tissues.

Pancreas.

Considerable parenchymatous degeneration.

Considerable congestion and slight perivascular round cell accumulation.

Cloudy swelling or hyaline degeneration of island cells.

Supra-renal.

Atrophia and slight parenchymatous degeneration.

Intense hemorrhages in cortical tissues and some round cell accumulation.

Thyreoid.

In statical state.

Pituitary body.

Intense congestion (with some leucocytes in capillaries),

slight increase of capillary endothel-cells, and parenchymatous degeneration.

Slight congestion and slight hemorrhages in posterior lobe.

Testicle.

Atrophia testis III.

Brain.



25 years old. ♂

Days of course. ca. 105 days.

Infest.-mode. Per-cutaneous infection.

Skin. Hyperkeratosis.

Muscles. No remarkable changes.

Heart. Degeneratio mycardii. Some leucocytes in capillaries.

Aorta. No remarkable changes, macroscopically.

Tonsil. No remarkable changes, macroscopically.

Pharynx. No remarkable changes, macroscopically.

Broncha. Bronchilosis catarrhalis.

Lang. (r). Lobular pneumonia with severe exsudative
-hemorrhagic perifocal changes.

(l). Lobule-acinous pneumonia (hemorrhagic-exudative),
with caseous necrotic foci and cavern-formations
at some places.

Liver. Hepatitis serosa II. with multiple miliary necrosis
(lymphocytes-accumulation).

Stomach. Slight catarrh.

Small-Intestine. Reactive hyperplasia of lymphatic nodulus.
Germinative centres with some increased histiocytes
and some giant cells, due to chronic

[REDACTED]

Large-Intestine. No remarkable changes, macroscopically.

Spleen. Angio-Folliculitis haemorrhagico-exsudativa.
 Spleno-Fasciulitis exsudativa et necroticans.

Lymph-node. No remarkable changes, macroscopically.

Kidney. Considerable Glomerulo-nephrosis (glomeruli mainly in
 exudative form), with considerable polar edema.
 Nephrosis I (III at some places) with interstitial
 edema.

Pancreas

Supra-renal. Intense atrophia and dissociation.
 Intense edema and intense round cell accumulation in
 cortical tissues.

Thyreoid. Subacute disfiguring with slight congestion and
 hyalinous degeneration of interstitium.
 Considerable degeneration of follicular epitheliums.

Pituitary-body. Considerable congestion and subendothelial edema.
 Parenchymatous degeneration. (slight).

Testicle. Atrophia testis III.

Brain. No remarkable changes.

731.

ca 25 years old. ↑

Days of course.

ca 3 months.

Infect-mode.

Per-cutaneous infection?

Skin.

No remarkable changes.

Muscle.

No remarkable changes.

Heart.

Intense degeneration and trophia.

Intense interstitial edema, slight hemorrhages in myocardium.

Aorta.

No remarkable changes, macroscopically.

Tonsil.

No remarkable changes, macroscopically.

Pharynx.

No remarkable changes, macroscopically.

Bronchus.

Bronchiolitis catarrhalis.

Lung. (r).

Miliary necrosis with intense hemorrhagic perifocal changes.

Lung. (l).

Acino-lobular, leucocytic pneumonia with intense perifocal reactions.

Liver.

Hepatitis serosa III - IV, with remarkably increased Kupfer's cells and multiple millet-corn large glanders-knots.

Stomach.

No remarkable changes, amroscopically.

[REDACTED]

Small-Intestine. Colitis catarrhalis.

[REDACTED]

Spleen. Angio-Folliculitis haemorrhagico-exsudativa et necrotica
ns.

Spleno-Fasciculitis exsudativa et necroticans.

Lymph-node. No remarkable changes, macroscopically.

Kidney. Considerable Glomerulo-nephrosis (glomeruli
mainly in rather degenerative form), with some polar
changes.

Some remarkable round cell accumulation at peri-
glomerular tissues.

Nephrosis I, with intense interstitial edema.

Pancreas.

Suprarenal. Intense dissociation and atrophia and some
degeneration of parenchymatous cells.

Some localised hemorrhages.

Thyroid. Subacute Thyreoiditis with multiple glanders-knots.

Pituitary body. Considerable congestion, slight increase of capillary
endothel-cells.
Slight degeneration of parenchymatous cells (esp.
basophilic cells).

Testicle. Atrophia testis II.

Brain. No remarkable changes, macroscopically.

[REDACTED]



Heart

[REDACTED]

H E A R T

(A) Microscopical Investigation.

[REDACTED]

16.

Parenchymatous degeneration. Partial hemorrhages in epicardium.

50.

Parenchymatous degeneration. Slight increase of histocytes in interstitium; Appearance of myocytes around blood-vessels.

Monocytes-accumulation in some blood-vessels.

85.

Rheumatoid-knots-formation around veins: miliary sized accumulation of histiocytic cells and adventitial cells, and myolytic decay of some neighbouring muscle fibres.

152.

Slight parenchymatous degeneration and slight haemorrhages in interstitium.

167.

Parenchymatous degeneration and medium appearance of myocytes around some blood-vessels. Partial hemorrhages in epicardium.

176.

Parenchymatous degeneration. Slight edema and slight appearance of myocytes in interstitium.

178.

Slight parenchymatous degeneration. Intense venous congestion and increase of histocytes around blood-vessels.

[REDACTED]

[REDACTED]

[REDACTED]

180.

Slight parenchymatous degeneration. Slight appearance of myocytes in endocardium. Venous congestion.

Slight parenchymatous and, at some place, basophilic degeneration. Slight appearance of myocytes in endocardium and venous congestion.

190.

Remarkable parenchymatous degeneration. Remarkable edema and histiocytes-accumulation in interstitium.

193.

Parenchymatous degeneration and intense atrophía of myocardium. Remarkable appearance of myocytes in interstitium.

205.

Parenchymatous degeneration and slight appearance of myocytes in interstitium.

207.

Parenchymatous degeneration and atrophía. Remarkable edema in interstitium.

221.

Parenchymatous degeneration and atrophía. Remarkable edema in interstitium.

224.

Parenchymatous degeneration and atrophía. Remarkable edema in interstitium.

229.

In subepicardium and myocardium, multiple miliary sized necrotic places, which united each other to form rather diffuse necrosis.

[REDACTED]

[REDACTED]

Accumulation of lymphocytes and histiocytes at perifocal parts of these miliary necrosis.

In the neighbouring tissues, muscular fibres fall into pieces and collapse around these places.

254.

Parenchymatous degeneration and atrophia. Remarkable edema and slight myocytes-accumulation in interstitium.

256.

Parenchymatous degeneration and some myocytes in interstitium. Some places are rearranged with callously increased connective tissues and hyaline degeneration of blood-vessel-walls.

727.

Parenchymatous degeneration. Accumulation of leucocytes and monocytes in blood vessels of epicardium.

Remarkable accumulation of myocytes in interstitium.

731.

Atrophia and intense parenchymatous degeneration, due to intense edema. Slight hemorrhages in myocadium.

[REDACTED]

[REDACTED]

[REDACTED]

(B) S U M M A R Y .

In vestigation on 19 micro-slices. [REDACTED]

- a) Endocardium: Generally no remarkable changes, except 2 cases with slight mesenchymal reactions.
- b) Myocardium: some intense edema, some slight hemorrhages (in 4 cases), intense venous congestion in 5 cases, a few of polynuclear leucocytes, lymphocytes and monocytes in blood-vessels. Slight edematous swelling of vessel-walls with more or less intense peri-vascular edema and in 1 case rheumatoid-knots-formation: nemely. miliary sized accumulation of histocytes and adventitial cells around the veins and myocytic decays of some neighbouring muscle-fibres.

Intense cloudy swelling (disappearance of striation, various degeneration of nuclei, etc.) in 9 cases and basophilic degeneration in 1 cases.

In subepicardial myocardium of 1 case exist multiple miliary necrosis (glanders-knots) in a row. Glanders-knots (most and central parts fall into the caseous or structureless necrosis) are surrounded with extremely intense hemorrhagic and exudative perifocal reactions (severe hemorrhage, severe edema, lymphocytes-infiltration and decay of muscular cells).

These hemorrhagic and exudative changes propagated themselves to the neighbouring tissues with more or less intense reactions.

Some muscular fibres which degenerated glassy or waxy and broked or losed their nuclei, are scattered in these inflammatory places.

[REDACTED]

HEART

		16	50	85	146	152	167	176	175	180	190	193	205	207	221	224	229	254	256	727	731	
Parenchyma of Myocardium	Fragmentation	-	-	-	+	##	-	-	+	-	-	##	-	-	-	-	-	-	-	-	-	
	Lipofuscin	-	-	##	+	+	-	##	+	+	+	+	+	+	+	+	-	+	-	##	##	
	Atrophia	(+)	-	-	-	-	-	-	(#)	-	(+)	##	-	(#)	(+)	##	-	+	+	-	##	
	Hypertrophia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Disappearance of Striations	+	+	##	(#)	-	+	+	+	+	(#)	+	(+)	+	+	+	(##)	(+)	-	-	##	
	Cloudy Swelling	##	##	##	+	-	##	##	+	+	##	+	(#)	##	+	+	+	+	(+)	+	##	
	Vacuolar Degeneration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Hyaline Degeneration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(#)	-	-	-	
	Basophilic Degeneration	-	-	-	-	-	-	-	-	(+)	-	-	-	-	-	-	-	-	-	-	-	
	Waxy Necrosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Changes of Nuclei	Pyknosis	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Swelling	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Karyolysis	+	+	##	-	-	+	-	-	+	+	+	+	+	+	+	+	+	+	+	+	
	Disappearance	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	(##)	##	##	-	##	
Interspaces of Myocardium	Edema	-	-	-	-	-	+	+	-	##	+	-	##	##	##	##	##	##	##	##	##	
	Hemorrhage	-	-	-	-	(#)	-	-	-	-	-	-	-	-	-	-	(##)	-	-	-	+	
	Contents of Blood Vessels	Erythrocytes	+	##	+	+	##	+	##	##	-	+	+	-	-	-	-	+	+	+	+	+
		Leucocytes	-	-	(-)	-	-	-	-	(-)	-	(-)	-	-	-	-	-	-	-	-	-	-
		Lymphocytes	-	-	-	-	-	(+)	-	-	-	-	-	-	-	-	-	-	-	(-)	-	-
		Monocytes	-	##	-	-	-	(-)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Infiltration of Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Infiltration of Lymphocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(#)	-	-	-	-	
	Proliferation of Histiocytes	-	(#)	-	+	-	-	-	(#)	+	(+)	-	-	-	-	-	(##)	-	-	-	-	
	Proliferation of Myocytes	-	##	-	##	+	-	-	-	-	-	##	-	-	-	-	-	-	+	##	##	
Changes of Vessel Walls	Thickening	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Edema	##	##	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	
	Adventitial cells	-	-	(+)	##	-	-	-	-	-	-	+	-	-	-	-	-	-	(+)	+	+	
Perivascular Edema	##	+	-	##	-	(+)	##	+	+	+	+	##	##	##	##	+	##	##	##	##		
Endocardium	Edema	+	-	-	-	+	##	-	-	-	-	-	-	-	-	-	+	##	-	+		
	Infiltration	Erythrocytes	-	-	-	(+)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Lymphocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Proliferation of Mesenchymal cells	-	-	-	##	-	-	-	-	(#)	-	-	-	-	-	-	-	-	-	-	-		
Epicardium	Edema	+	-	+	-	-	+	##	-	-	+	-	-	-	+	+	##	+	##	-	+	
	Congestion	-	+	-	+	-	+	+	+	##	+	+	+	+	+	+	+	+	+	+	+	
	Infiltration	Erythrocytes	(#)	+	-	-	(+)	-	-	-	-	-	-	-	-	-	-	(#)	-	-	-	
		Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Lymphocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Proliferation of Histiocytes	+	+	-	-	(+)	-	-	+	-	+	-	-	-	+	+	(#)	+	-	(+)	+		

[REDACTED]

Intense edematous swelling
of blood-vessel-wall.

[REDACTED]



Typical glanders-knot in
subserous tissues.



[REDACTED]

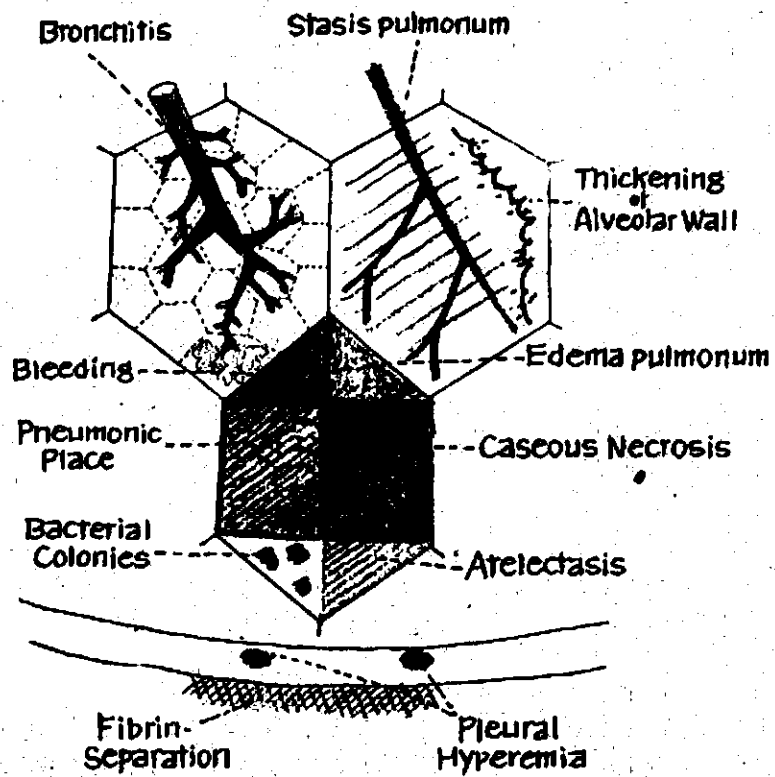
Rheumatoid-kont and desolative
decays of the neighbouring parenchymatous
cells.



Some round cell infiltration and some
hyperplasia of interstitial connective
tissues.



Lung



L U N G

A) MICROSCOPICAL INVESTIGATION

16. (left, superior)

Bronchiolitis catarrhalis and stasis et edema pulmonum.

Considerable congestion and edematous swelling of alveolar walls with inflammatory edema and slight hemorrhages in alveoli. Some bacterial accumulations in some alveoli.

16. (left inferior)

Bronchiolitis catarrhalis, diffuse Alveolitis and stasis et edema pulm. Considerable congestion, edematous swelling and leucocytes-emigration at alveolar walls with inflammatory edema and leakages of leucocytes in some alveoli. Edematous swelling of interlobular connective tissues.

16 (right)

Stasis et edema pulmonum: considerable congestion and edematous swelling of alveolar walls with inflammatory edema in alveoli.

50.

Multiple military glanders-knots, severe pulmonary congestion and pleural hyperaemia and hemorrhages.

Remarkable ~~inflammation~~ Alveolitis: remarkable

[REDACTED]

congestion, edematous swelling, leucocytes-emigrations at alveolar walls and following reactive changes: inflammatory edema and hemorrhages in alveoli.

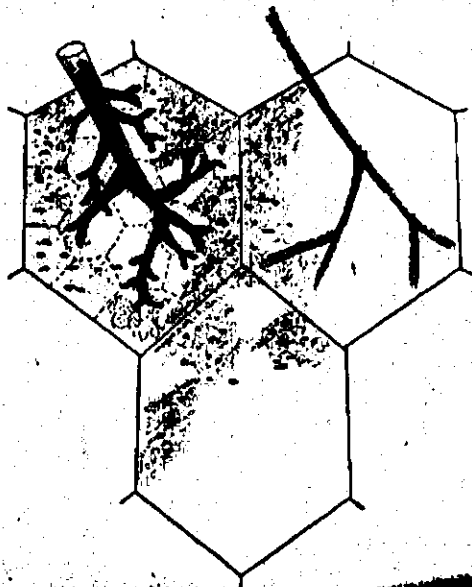
These inflammatory processes develop at some places to multiple Glanders-knots-formation, with numerous leucocytes or their nuclear fragments and residues of decayed capillary walls. These necrotic changes spread with severe exudative changes (edema, remarkable congestion and hemorrhages) to neighbouring tissues.

Bronchiolitis catarrhalis with a large quantity of hemorrhagic masses as contents and considerable peribronchiolar congestion. (Bronchiolitis and Peribronchiolitis).

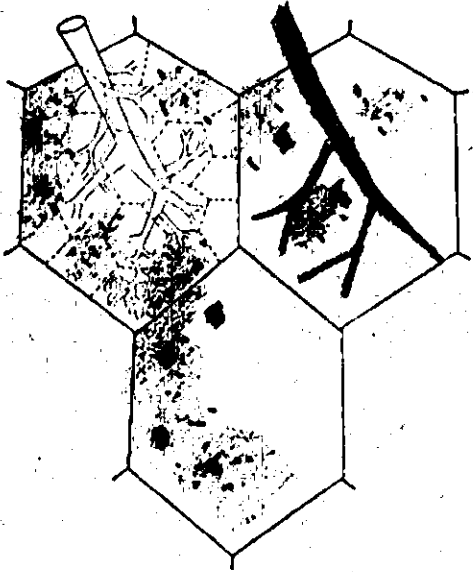
Severe heperacemia, severe hemorrhages and separation of fibrinous masses in adjacent pleural tissues (Pleuritis haemorrhagico-fibrinosa) and exudative-hemorrhagic military glanders-knots in subpleural tissues.

146. (left superior)

Bronchiolitis catarrhalis in high degree and considerable diffuse Alveolitis: severe edematous swelling and leucocytes-emigration at alveolar walls, accompanied with considerable inflammatory edema in alveoli.

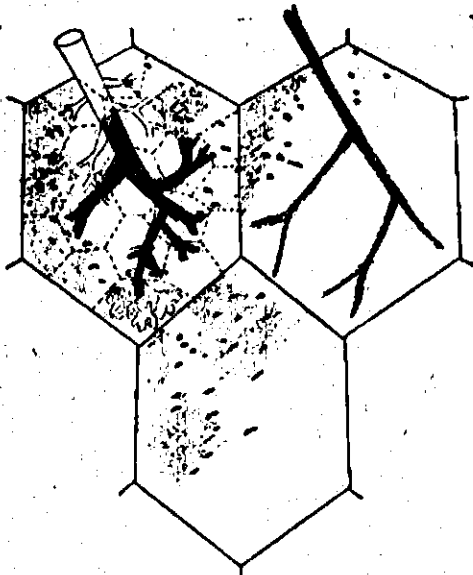


[REDACTED]



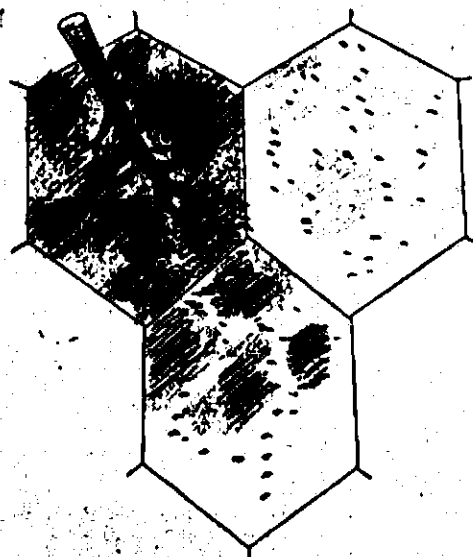
146. (left inferior)

Edematous swelling and congestion of alveolar walls in high degree and slight inflammation, edema and desquamation of alveolar epithel cells in alveoli. Bacterial accumulations in alveolar walls and alveoli.



146. (right apex)

Bronchiolitis catarrhalis and slight diffuse Alveolitis: remarkable congestion, remarkable edematous swelling, and slight leucocytes emigration at alveolar walls with inflammatory edema and desquamation of alveolar epithels in alveoli.



146. (right median)

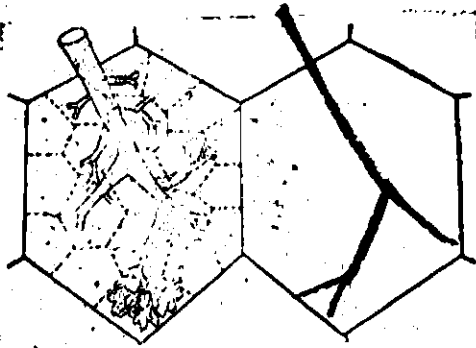
Bronchiolitis catarrhalis gravis and lobular exsudative pneumonia. Bronchiolitis catarrhalis in high degree with numerous leucocytes, catarrhalic masses, desquamation of bronchial epithel cells and some bacterial colonies as contents.

Remarkable edematous swelling of peribronchial tissues.

Diffuse Alveolitis (remarkabl congestion and desquamation of alveolar epithel cells in alveoli) developpe at some peribronchiolar tissues which are attached to damaged bronchiolus.

[REDACTED]

[REDACTED]

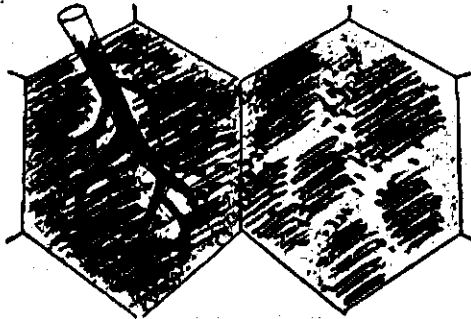
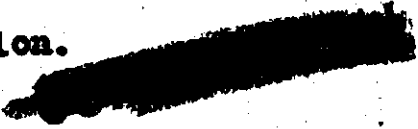


to multiple acinous or acino-lobular pneumonia in leucocytic-exsudative form.

146. (right inferior)

Slight pulmonal congestion.

146. (right)



Lobular pneumonia in leucocytic-hemorrhagic form and diffuse inflammatory edema in severe degree.

152.

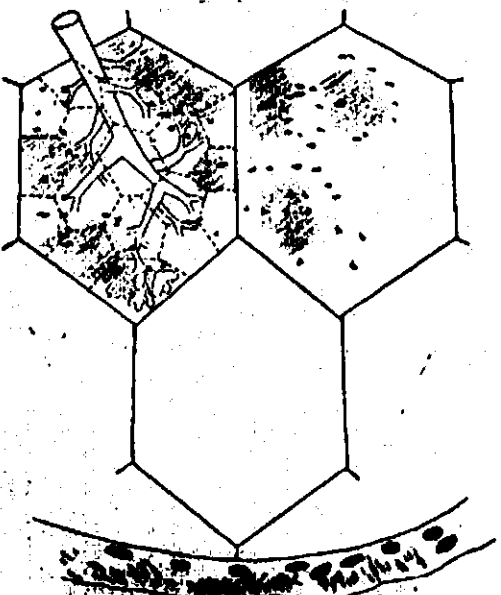
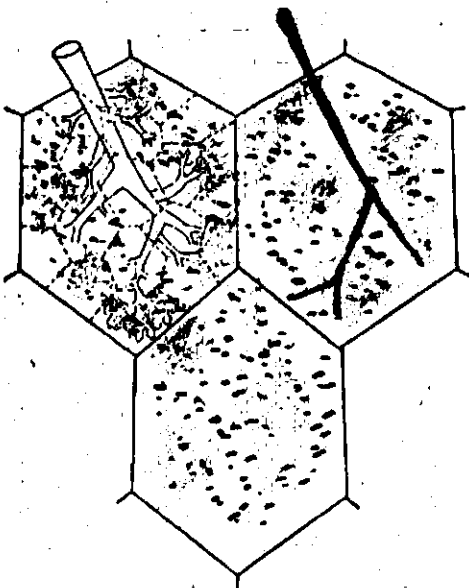
Edema pulmonum and diffuse Alveolitis.

Remarkable edematous swelling, congestion and leucocytes infiltration at alveolar walls, accompanied with slight inflammatory edema and slight hemorrhages in alveoli.

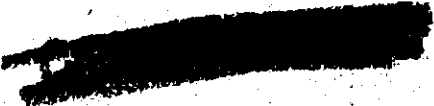
167. (a)

Slight diffuse Alveolitis and Pleuritis haemorrhagico-fibrinosa.

Slight diffuse Alveolitis: slight round cell-infiltration and edematous swelling of alveolar walls with slight desquamation of alveolar epithel cells in alveoli. Atelectatic alveolar spaces.



In pleural tissues: capillary congestion, remarkable hemorrhages at some places and separation of fibrinous masses.



167. (b)

Obsolete lobular hemorrhagic pneumonia in organizing process. In some alveoli of scino-lobular hemorrhagic pneumonia, exist numerous erythrocytes and among them, many proliferated alveolar epitheliums. Some other alveoli of these hemorrhagic places are rearranged almost completely with proliferative cells (alveolar epitheliums, histiocytic cells and fibroblasts). In other general tissues, esp. neighbouring tissues, exist also considerable congestion and considerable hyperplasia of alveolar epithel cells.

In pleural tissues: considerable congestion and edematous swelling.

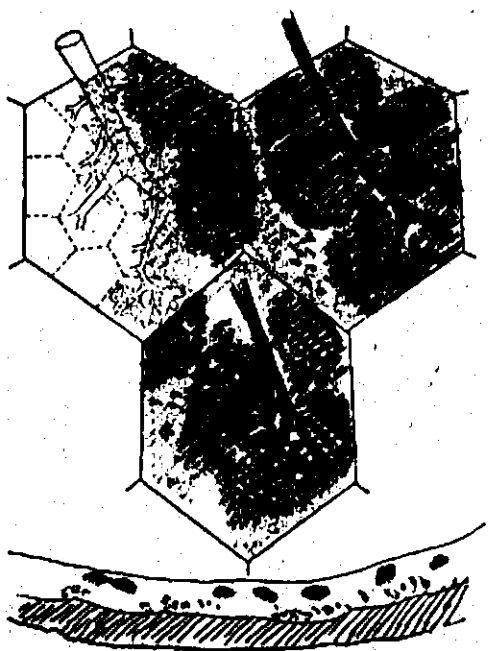
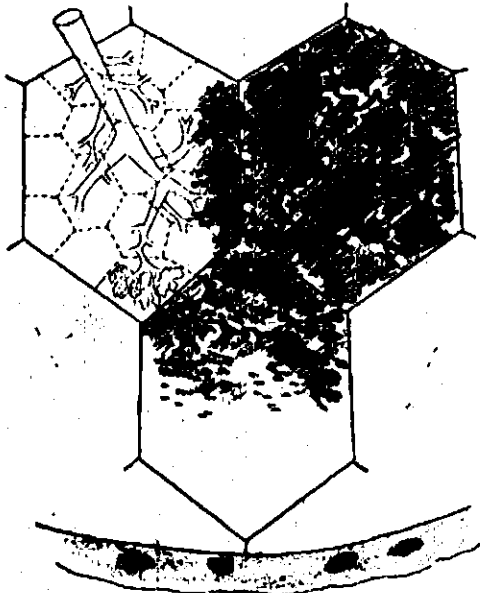
167. (c)

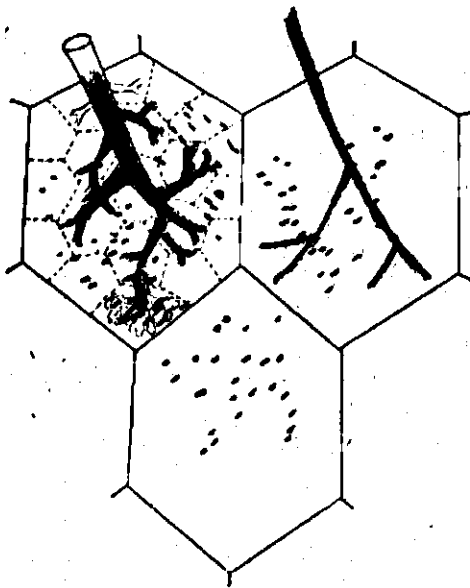
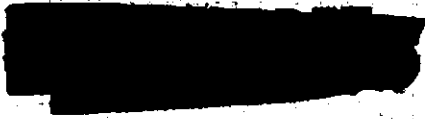
Endoarteritis and Endoarteriolitis necroticans:

*) In arteries and arterioles, numerous leucocytes and their nuclear decayed fragments, necrotic ruins of arterial walls and perivascular leucocytes-accumulation and edematous swelling in high degree.

*) Multiple lobular pneumonic changes in the catch-areas of the above mentioned damaged blood-vessels.

In the focal parts of pneumonic places exist numerous leucocytes and various decayed masses





with severe reactive changes (Bleeding, separation of fibrinous masses or inflammatory edema in high degree).

*) And these pneumonic places united each other to form multiple acino-lobular pneumonia.

*) Bronchiolitis catarrhalis with a large quantity of mucous or decayed masses as contents.



~~177.~~

Bronchiolitis catarrhalis with a large quantity of mucous masses, desquamation of epithel cells and erythrocytes and contents.

Slight pulmonal congestion.

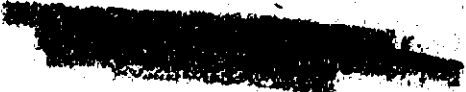
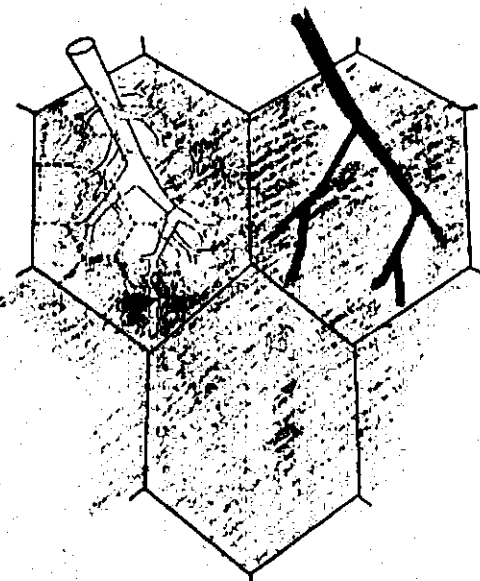
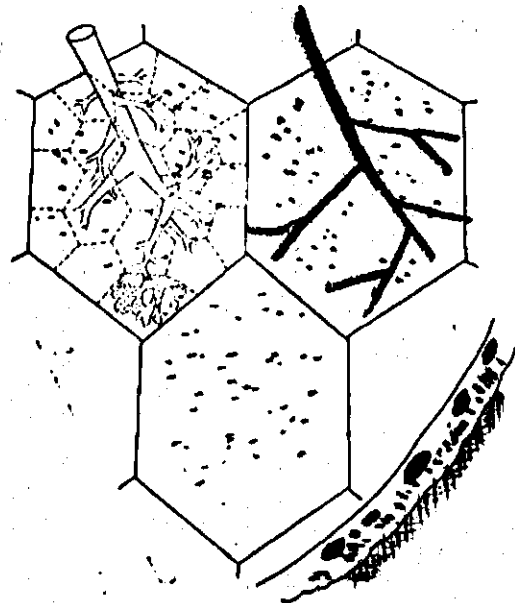
180. 178.

Considerable congestion and slight diffuse hemorrhages in alveoli.

Remarkable pleural and subpleural congestion and hemorrhages with hemorrhagic-fibrinous masses on the pleural surfaces. (pleuritis haemorrhagico-fibrinosa).

180.

Considerable congestion and edematous swelling of alveolar walls and remarkable inflammatory edema in alveoli. Bacterial accumulation at some alveolar walls.



190.

Remarkable congestion, edematous swelling and considerable round cell infiltration at alveolar walls with more or less hyperplasia of alveolar epithelial cells.

Pleural and subpleural hyperaemia in high degree.

193. (a)

Endarteriitis necroticans and multiple supermiliary glanders-knots in its following alveoli. Endarteriitis necroticans with a large quantity of leucocytes and their fragments as contents and necrotic ruins of walls.

Supermiliary, more or less circumscribed glanders-knots with leucocytes-accumulation in perivascular or catchment-areas of attacked arteries. These pneumonic knots are more or less localised and bounded sharply with slight hemorrhagic perifocal zone.

In other general lung-tissues: considerable congestion and edematous swelling of alveolar walls and intense inflammatory edem in alveoli. Severe congestion and edematous swelling of interlobular connective tissues.

193. (b)

Diffuse Alveolitis: considerable congestion,

[REDACTED]

edematous swelling and slight round cell infiltration of alveolar walls with slight leakage of leucocytes in alveoli and inflammatory edema.

Bacterial colonies in alveoli and alveolar walls. Slight hyperaemia and slight hemorrhages in pleural tissues.

205. (a)

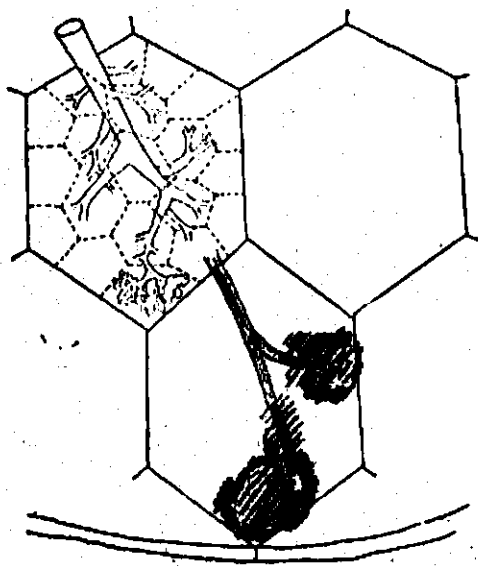
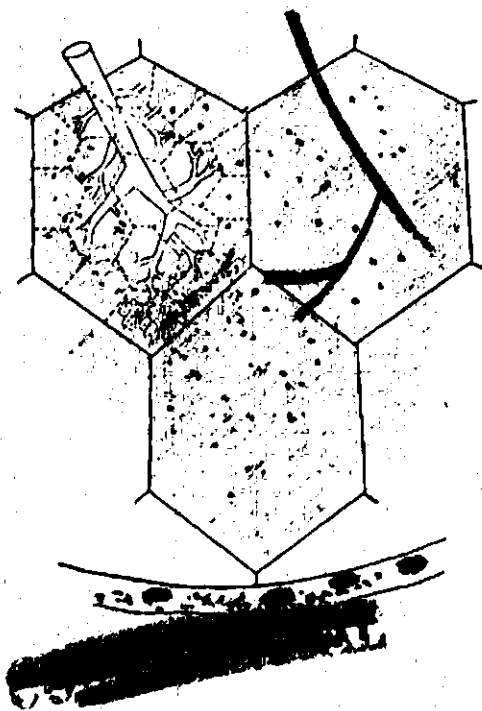
Endarteriitis necroticans and more or less localised military glanders-knots.

Endarteriitis necroticans with a large quantity of leucocytes, necrotic ruins of walls and severe edematous swelling of perivascular tissues.

Multiple supermiliary glanders-knots in the attachment-areas of attacked blood-vessels. (hemotogenous glanders-knots).

Supermiliary, more or less sharply bounded, sphenical knots with numerous leucocytes and their nuclear decayed masses are bounded with slight hemorrhagic perifocal reactive zone more or less sharply to the neighbouring tissues. The neighboring general pulmonal tissues with slight swelling and slight congestion of alveolar walls. No remarkable changes else.

[REDACTED]



[REDACTED]

vessels and subpleural miliary glanders-knots
in the same mode.

[REDACTED]

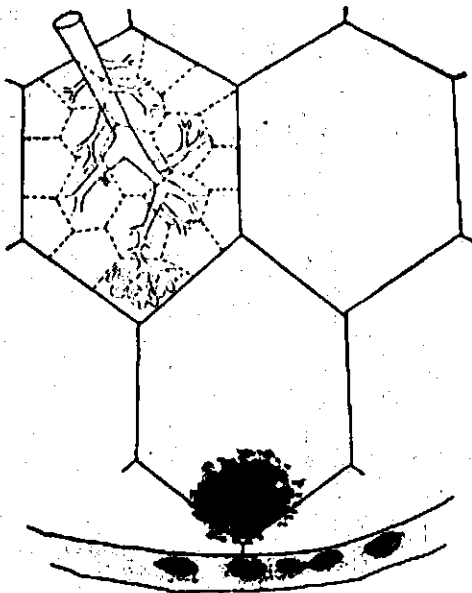
The most parts of knots are intensively leucocytic and necrotic, and perifocal parts of them slightly hemorrhagic.

These inflammatory processes do not spread so intensely to the neighbouring tissues: considerable congestion, slight edematous swelling and leucocytes emigration in alveolar walls with slight hyperplasia of alveolar epithel cells.

207. (b, c, d)

subpleural supermiliary glanders-knots.

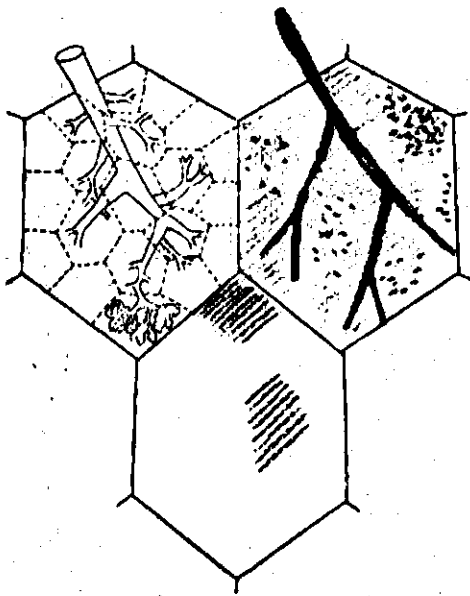
In subpleural tissues exist sphenical, more or less sharply bounded supermiliary glanders-knots. The most focal parts of these knots with numerous leucocytes and their nuclear fragments, decayed masses of alveolar epithel cells and slight hemorrhages and perifocal parts with slight hyperaemia. Bounded more or sharply, but without any proliferative processes. Other neighbouring general tissues: slight congestion, slight edematous swelling of alveolar walls and no particular changes else. Intense edematous swelling and hyperaemia of adjacent pleural tissues.



[REDACTED]

207. (e)

[REDACTED]



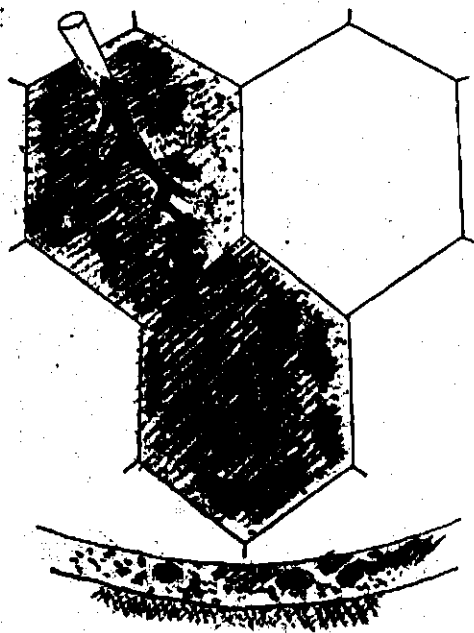
Remarkable congestion and edematous swelling of alveolar walls with slight inflammatory edema and slight haemorrhages in alveoli. Atelectasis of alveolar spaces.

221. (a).

Lobular pneumonia with severe perifocal changes and Pleuritis haemorrhagico-fibrinosa. In subpleural tissues exist lobular pneumonic places.

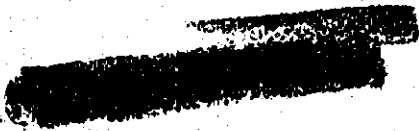


The focal parts with a large quantity of leucocytes and their nuclear fragments, decayed masses of alveolar epithel cells, more or less intense hemorrhagic-exsudative reactions into the neighbouring tissues gradually.



◦) Other general tissues : considerable congestion and edematous or fibrinous swelling of alveolar walls with somewhat remarkable inflammatory edema, slight hemorrhages and leakage of leucocytes in alveoli.

◦) Bronchiolitis catarrhalis of adjacent bronchioli and Pleuritis haemorrhagico-fibrinosa (in pleural tissues, considerable congestion



[REDACTED]

[REDACTED]

edematous swelling and slight haemorrhage in pleural tissues with the sero-haemorrhagic masses on the pleural surface.

22I (b).

Multiple acinous or acino-lobular pneumonia.

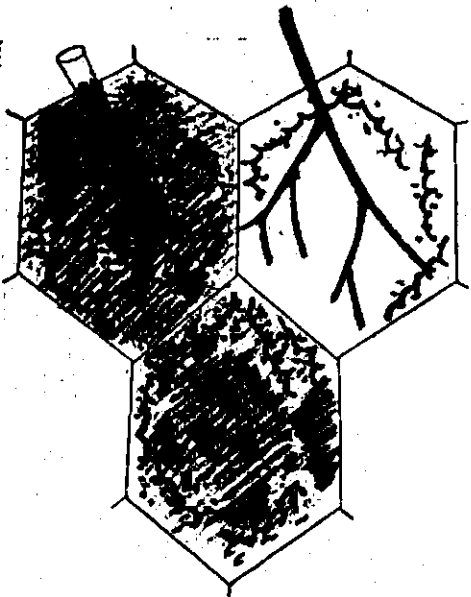
In bronchus and their fragments, serous exsudat, decayed epithel cells and erythrocytes with necrotic ruins of bronchiolar walls and severe inflammatory changes of peribronchiolar tissues: edematous swelling, hyperaemia and leucocytes-infiltrations.

) Multiple acinous pneumonia in the attachments -areas of attacked bronchiolus and these pneumonic places united each other into acino-lobular pneumonia.

In pneumonic areas exist numerous leucocytes and their fragments, decayed masses of alveolar epithel cells and etc, fibrinous separative masses, haemorrhages and numerous bacterial masses.

These inflammatory processes run into the surrounding tissues with severe exsudative-haemorrhagic reactions (congestion, haemorrhages and inflammatory edema).

[REDACTED]



[REDACTED]

[REDACTED]

Some arteriole in the focal parts show Endo-arteriolitis necroticans (embolus-formation with various decayed masses and necrotic ruins of blood-vessel-walls).

) In other general tissues : considerable congestion, edematous swelling, more or less remarkable leucocytes-emigrations of the alveolar walls with exsudative-haemorrhagic changes (inflammatory edema, haemorrhages, leucocytes leakage and desquamation of alveolar epithel cells in alveoli) and slight hyperplasia of alveolar epithel cells.

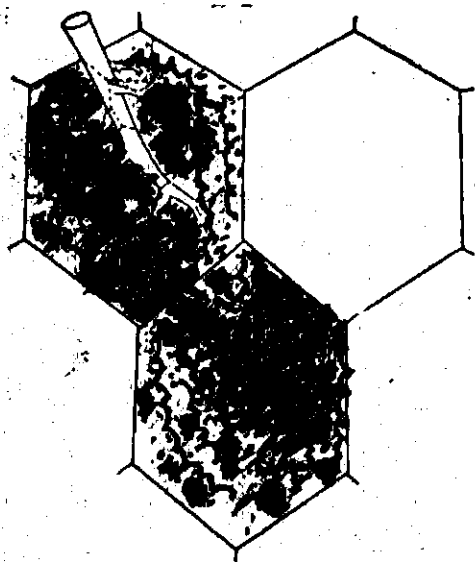
221 (c).

Multiple acinous or acino-lobular pneumonia. The same changes so as above mentioned, exsudative-necrotic changes of bronchiolus and their following lower pulmonal tissues:

: severe leucocytic and haemorrhagic Endobronchiolitis and peribronchiolitis with multiple acinous or acino-lobular pneumonia.

Acinous pneumonia are formed mainly at my so-called intercalary portions of lung and united each other with more or less remarkable exsudative-haemorrhagic perifocal changes into

[REDACTED]



[REDACTED]

acino-lobular pneumonia.

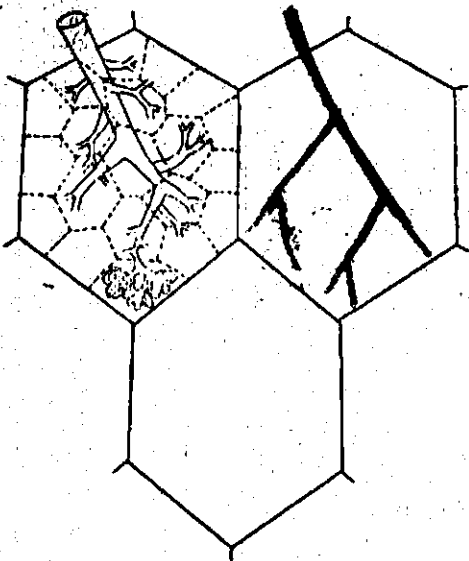
[REDACTED]

In pneumonic areas exist various decayed masses (leucocytes and their fragments, fibrinous masses, haemorrhages or caseous necrotic masses of alveolar epithel cells) and slight hyperplasia of alveolar and bronchial epithel cells with giant cell-formation at some places.

Some arterioles in the focal parts show Endoarteriolitis or Endoarteriolitis obliterans (hyalinous thickning of blood-vessel walls in severe grade, edema and round cell infiltration in media, hyalinous thickening of intima and adventitial tissues).

These inflammatory processes run into the neighbouring tissues with somewhat remarkable exsudative reactions (congestion, leucocytes-emigration, edematous swelling of alveolar walls with slight bleeding, inflammatory edema, leucocytes-leakage and desquamation of alveolar epithel cells in alveoli and slight hyperplasia of alveolar epithel cells).

222. Slight congestion and edematous swelling of alveolar walls.



⁴
222.

Slight congestion and edematous swelling of alveolar walls with remarkable edema in alveoli.

229. (a)

Multiple lobular or acino-lobular pneumonia.

*) Exsudative-necrotic changes of bronchiolus and peribronchial tissues, in high degree:

exsudative necrotic masses in bronchiolus and necrotic ruins of bronchiolar walls with exsudative-necrotic inflammation of peribronchiolar tissues.

*) Multiple acino-lobular or lobular pneumonic places in the catchment-areas of attacked bronchiolus.

These pneumonic changes with caseous necrotic masses in focal parts run into the neighbouring tissues with severe reactive perifocal reactions (congestion, haemorrhages and fibrinous separation and more or less remarkable leucocytes-emigrations).

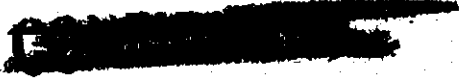
Other general tissues: in inflammatory edema and hemorrhages in high degree.

229. (b)

The same glanders-pneumonia (so as above mentioned) with Pleuritis sero-fibrino-hemorrhagica in adjacent pleural tissues.



229. (c)



Pulmonal congestion, slight pulmonal edema and sunpleural hyperaemia with slight bleeding.

254. (a)

Multiple miliary or supermiliary glanders-knots in more or less proliferative form.

These glanders-nodulus exist mainly at intercalary pãrtions of lung. In the central focus exist numerous decayed fragments of leucocytes and caseous necrotic masses of pulmonal-tissues.

In the perifocal parts shows it more or less slight proliferative walls.

Other general tissues are in medium cãngestion and slight edematous swelling of alveolar walls with slight inflammatory edema and slight hemorr. hages in alveoli.

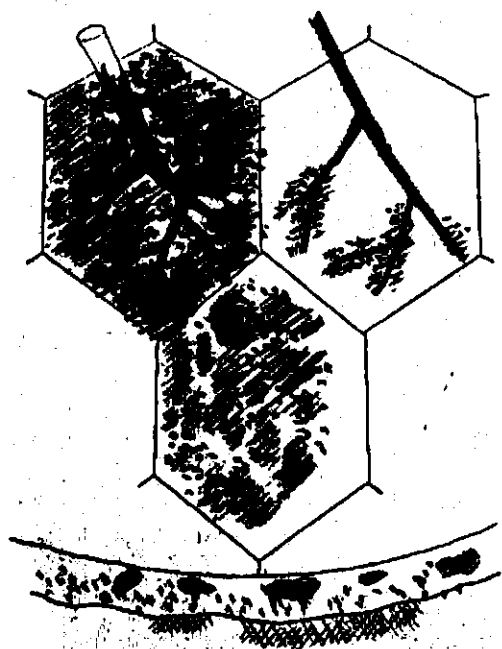
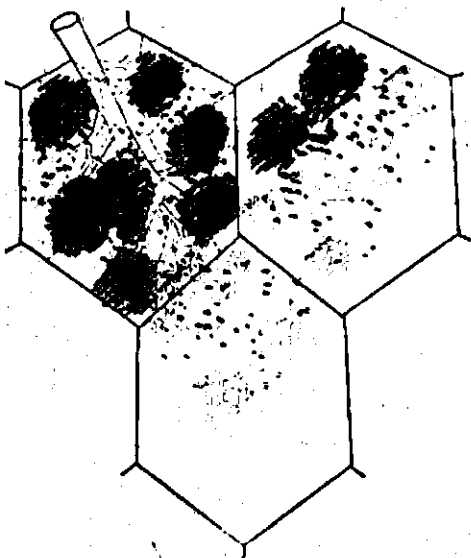
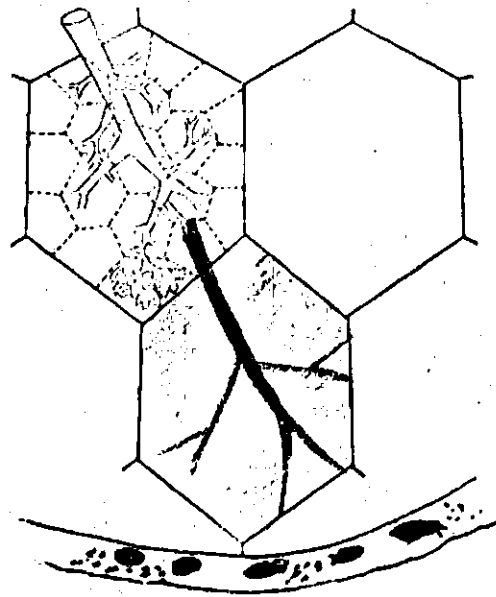
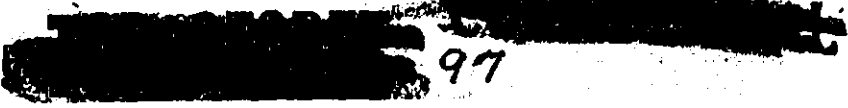
254. (b)

Multiple supermiliar, acinous or acino-lobular pneumonia.

These pneumonic changes occured mainly at the intercalary portions of lung.

In bronchiolus (esp. intercalary portion) and pulmonal tissues of its catchment-area occured pneumonic changes. The most parts (central focus) are caseous necrotic and its perifocal parts, severely leucocytic-hemorrhagic.

These pneumonic changes run into the neighbouring

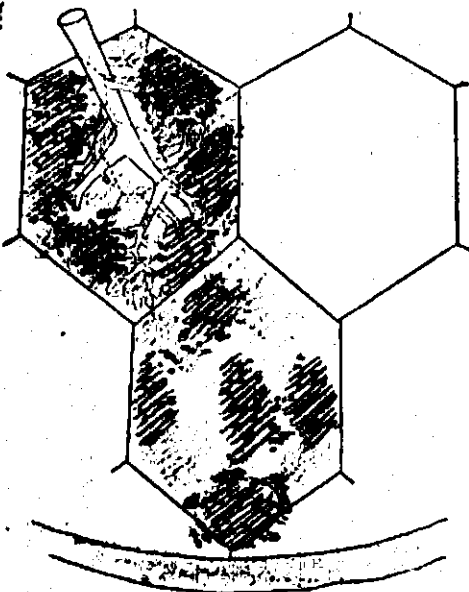


[REDACTED]

tissues with severe hemorrhagic-exsudative processes gradually and united each other to form acino-lobular pneumonic changes.

[REDACTED]

Other general tissues in remarkable congestion; severe edematous swelling and more or less remarkable leucocytes-infiltration of alveolar walls with inflammatory edema and hemorrhages in high degree and round cell infiltration in perivascular (veins and arterioles) tissues. Pleural tissues in remarkable congestion and hemorrhages with fibrinous hemorrhagic masses on the pleural surface (Pleuritis fibrino-hemorrhagica of adjacent pleura)-



254. (c)

Acino-lobular pneumonia with subpleural miliary glanders-knots.

The same changes as above mentioned.

256. (a)

Multiple miliary glanders-knots in leucocytic-hemorrhagic form.

The focal parts with numerous leucocytes and their nuclear fragments and the perifocal parts with leucocytic-hemorrhagic changes.

These pneumonic reactions run into the neighboring tissues with severe hemorrhagic-exsudative processes.

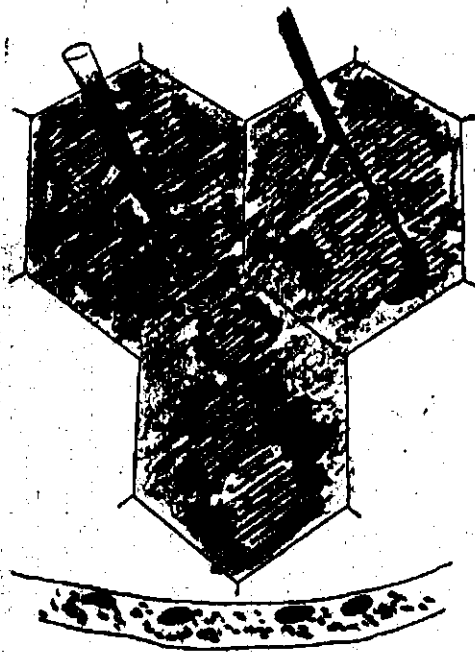
[REDACTED]

Other general tissues are in considerable congestion, edematous swelling and leucocytic infiltration of alveolar walls with slight hemorrhages and slight leucocytic infiltration in alveoli.

256. (b)

Multiple lobulo-acinous pneumonia and Pleuritis hemorrhagico-exsudativa.

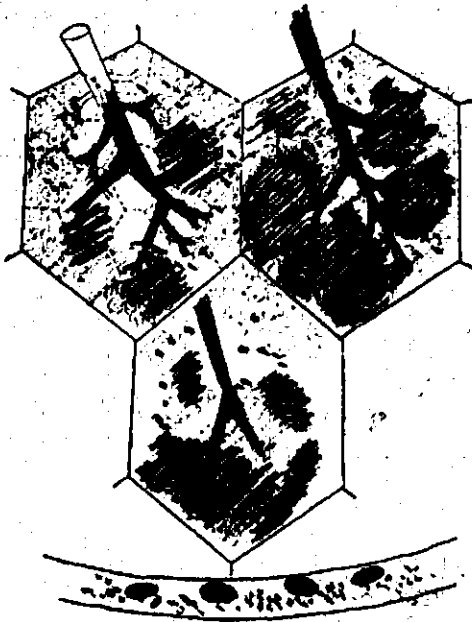
In the focal parts of pneumonia places exist a large quantity of leucocytes and their fragments and residual masses of ruined arterioles (Endoarteriitis necroticans: Embolus-formation with decayed cellular masses and necrotic ruins of their walls with perivascular leucocytic infiltration in high grade). In adjacent bronchiolus exist numerous and various decayed cell-elements, accompanied with necrotic ruins of bronchiolar walls.



These pneumonic changes united each other to form acino-lobular pneumonia and run into the neighbouring tissues with severe reactive hemorrhagic-exsudative processes (severe congestion, hemorrhages and leucocytic emigrations).

Other general pulmonaltissues are in severe edema and more or less remarkable hemorrhages in alveoli with medium congestion, edematous swelling and leucocytic infiltration of alveolar walls.

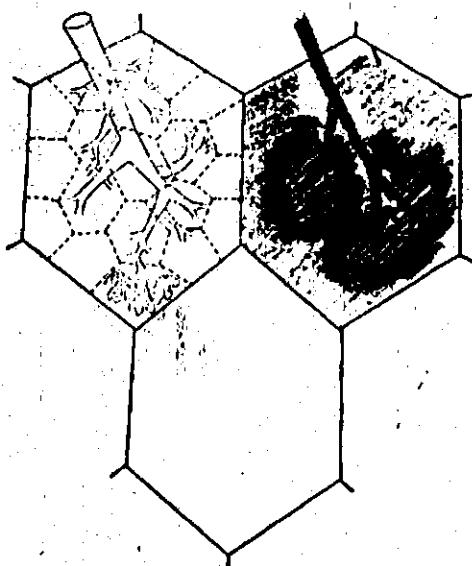
[REDACTED]



256. (c)

Multiple Endarteritis and Endarteriolitis necroticans and multiple acinous or acino-lobular pneumonia in exsudative-leucocytic-hemorrhagic form. In the catchment pulmonal tissues of attacked blood-vessels break out lobular leucocytic hemorrhagic changes. In the focal parts of the pneumonia exist numerous leucocytes and their fragments, decayed cellular and hemorrhagic masses. These changes run with severe hemorrhagic leucocytic perifocal changes into neighbouring tissues.

Other general pulmonal tissues are in slight congestion and slight edematous swelling of alveolar walls.



256. (d)

Endarteriolitis necroticans and lobulo-acinous pneumonia with hemorrhagic perifocal reactions.

256. (e)

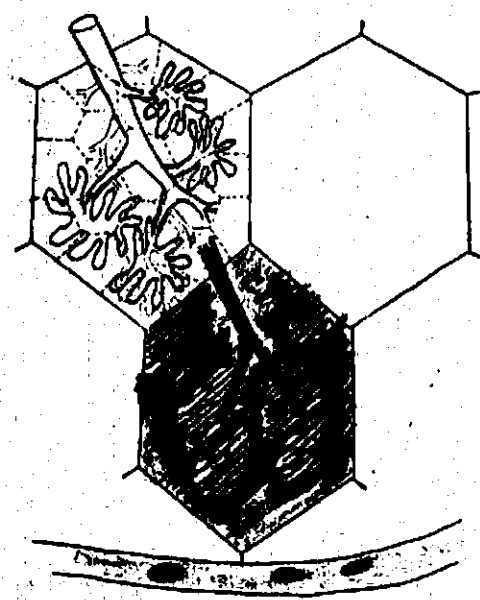
Endarteriolitis necroticans and subpleural acino-lobular pneumonia.

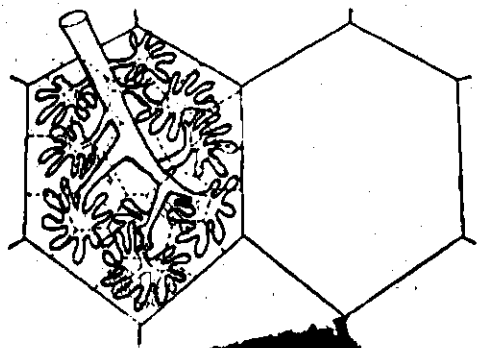
Multiple acino-lobular pneumonia with the same microscopical changes, as above mentioned.

Attend to the remarkable hyperplasia of bronchiolar or alveolar epithel cells at the intercalary portions of lung to ~~the~~ increase.

256. (f)

Billous increase of alveolar epitheliums at the





[REDACTED]

intercalary portions of lung as reactive proliferative changes. No remarkable changes else.

727. (a)

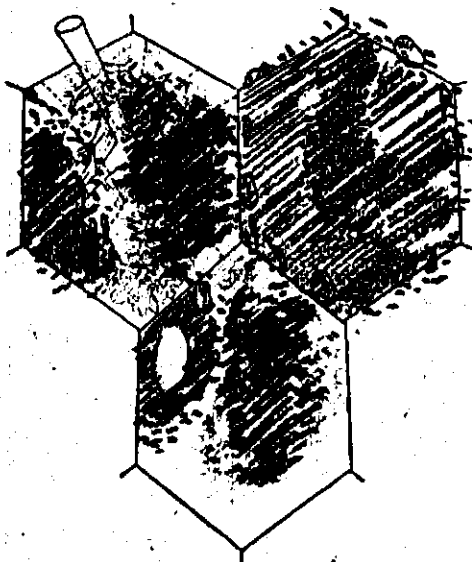
Endoarteriitis and Endoarteriolitis necroticans: Embolus-formation with decayed cellular fragments and necrotic ruins of the blood-vessel walls with severe perivascular leucocytic infiltration.

Diffuse lobular pneumonia in the catchment-area of the attacked blood-vessels. These pneumonic areas are severely hemorrhagic, leucocytic and necrotic and run with severe exsudative changes (hemorrhages, edema and leucocyts-emigration) into the neighbouring tissues.

Adjacent pleural tissues are in considerable congestion and edematous swelling.

727. (b)

Multiple lobulo-acinous pneumonia, which break out in the same processes, as above mentioned. Attend to the cavern-formation in its focal part and caseous ruins of tissues. In its perifocal zone exist slight lymphocytic wall with slight hyperplasia of epitheloid cells and giant cells. These pneumonic changes run with exsudative reactions (congestion, hemorrhages and round cell-infiltration) into the neigh-



[REDACTED]

bouring tissues.

Other general tissues are in congestion and edematous swelling of the alveolar walls with slight edema and slight desquamation of alveolar epithel cells in alveoli and on the other hand slight hyperplasia of alveolar epithel cells.

731. (a)

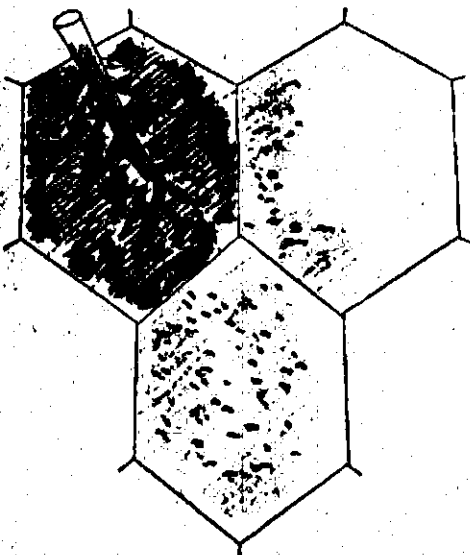
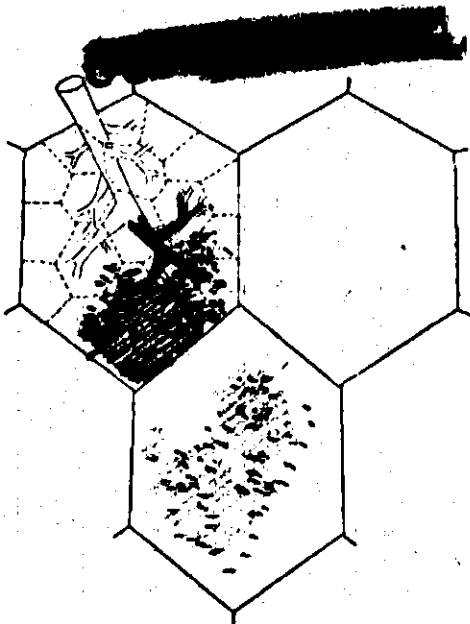
Miliary glanders-knots (leucocytic focal part and hemorrhagic perifocal part with severe hemorrhagic reactive zones).

Other general tissues, almost normal.

731.

acino-lobular glanders-pneumonia. Severely leucocytic in the most central focus and severely hemorrhagic in the perifocal parts. These pneumonic changes run with severe reactive processes (severe congestion and severe bleeding) into the neighbouring tissues: in bronchiolus of pneumonic areas exist numerous decayed cellular fragments and catarrhalic masses.

The neighbouring pulmonal tissues are in severe inflammatory edema, more or less leucocytic emigration and bleeding.



(B) S U M M A R Y

(I)

The birdseye-views of pathological changes in all cases.

16 (l).	Bronchiolitis catarrh.	Stasis et edema pulm. Slight diffuse Alveolitis with some bacterial dissemination.
16 (l,i).	Bronchiolitis catarrh.	Stasis et edema pulm. Slight diffuse Alveolitis.
16 (r).	Bronchiolitis catarrh.	Stasis et edema pulm. Slight diffuse Alveolitis.

50.	Bronchiolitis catarrh. (with some haemorrhagic masses) Peribronchiolitis (with remarkable congest.)	Severe diffuse Alveolitis. Multiple milliry glanders- rs-knots with severe haemorrhagic perifocal changes.
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146 (l,s).	Bronchiolitis catarrh gravis.	Stasis et edema pulm. Considerable diffuse Alveolitis
146 (l,i).	Bronchiolitis gravis.	Stasis et edema pulm. some desquamative epithels. Consid. diffuse Alveolitis with some bacterial dissemination.
146 (r,ap).	Consid. Bronchiolitis.	Stasis et edema pulm. Slight diffse Alveolitis.
146 (r,m).	Bronchiolitis gravrs.	Lobular pneumonia! catarrhalic-exsudative, sometimes. haemorrhagic- leucocytic, sometimes. Stasis pulm.
146 (r,i).	No remarkable changes.	Stasis pulm.

[REDACTED]

152. No remarkable changes.

[REDACTED]

Edema pulm.
Consid. diffuse Alveolitis.

167 (a). No remarkable changes.

Slight diffuse Alveolitis.

Pleuritis haemorrhagico-fibrin.

167 (b). Bronchiolitis levis.

Obsolete haemorrhagic pneumonia.
(acino-lobular), organised slightly with remarkably hyperplasiated alveolar epithels.

Pleural congestion.

~~167 (c). Bronchiolitis catarrh.
(with a large quantity of excreted masses)~~

- [REDACTED]
- 167 (C). Bronchiolitis catarrh.
(with a large quantity
of excreted masses). Endoarteritis and Endoarteriolitis
necroticans.
Multiple acino-lobular pneumonia.
Pleuritis obsoleta and pleural
congestion.
-
- 176 (). Bronchiolitis catarrh. slight pulmonal congestion.
-
- 178 (). Bronchiolitis catarrh.
in very slight degree. severe pulmonal congestion.
Pleuritis haemorrhagico-fibrin.
-
- 180 (). No significant changes. Consid. pulmonal congestion and
edema.
Bacterial accumulation at some
Places. Pleural congestion.
-
- 190 (). No significant changes. slight Alveolitis, accompanied
with slight hyperplasia of alveolar
epithels. Remark. congestion.
-
- 193 (a). No significant changes. Endoarteriolitis necroticans.
Supermiliary glanders-knots in
its catchment-areas.
Severe edema pulm.
Consid. pleural congestion.
-
- 193 (+). No significant changes. Consid. diffuse Alveolitis.
Edema et stasis pulm.
some bacterial dissemination.
Consid. pleural congestion.
-
- 205 (a). No significant changes. Endoarteriolitis necroticans.
Multiple supermiliary glanders-
knots. (without remarkable reactive
perifocal zone).
slight pleural congestion.
-
- 205 (b). No significant changes. Endoarteriolitis necroticans.
Multiple supermiliary glanders-
knots. (without remarkable haemorrhagic
perifocal changes).
stasis et edema pulm in general
tissues.
- [REDACTED]



- 207 (a). No significant changes. Endoarteriolitis necroticans.
Subpleural glanders-knots.
Multiple supermiliary glanders-knots, with slight perifocal hemorrhagic reactions.
- 207 (b). No consid. changes. Some acino-lobular Pneumonia.
Subpleural supermiliary glanders-knots, with slight perifocal hyperaemia.
No remarkable changes in other general tissues.

- 221 (a). Broncho-Bronchiolitis levis. Pleuro-pneumonia:
Lobular pneumonia.
Pleuritis sero-fibrinosa.
- 221 (b). Broncho-Bronchilitis gravis. Acinous or acino-lobular pneumonia, with severe exsudative-hemorrhagic perifocal changes.
- 221 (c). Broncho-Bronchiolitis. Acinous or acino-lobular pneumonia with multiple glanders-knots at intercalary portions of lung.

222 (r,I). No significant changes. Stasis pulm. levis.

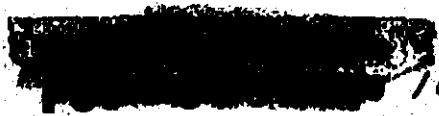
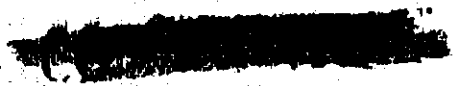
224 (r,I). No significant changes. Stasis et edema pulm. levis.
slight diffuse Alveolitis.

229 (a). Exsudative-hemorrhagic changes of bronchus and peribronchial tissues. Multiple acinous or acino-lobular pneumonia, with severe exsudative perifocal changes.

229 (b). " Multiple acino-lobular pneumonia with glanders-knots formations.
Pleuritis sero-fibrinosa.

229 (c). No remarkable changes. Stasis et edema pulm.
subpleural congestion.

254 (a). No significant changes. Multiple military glanders-knots at intercalary portions of lung, with slight proliferative perifocal changes.





- 254 (b). No significant changes. Multiple supermiliary glanders-knots and Acino-lobular hemorrhagic-leucocytic pneumonia with severe exudative perifocal changes. Pleuritis hemorrhagica. Remarkable perivascular round cell accumulations.
- 254 (c). No significant changes. Acino-lobular pneumonia. Subpleural glanders-knots

- 256 (a). No significant changes. Multiple military glanders-knots in hemorrhagic-leucocytic form, with severe exudative perifocal changes.
- 256 (b). " Multiple lobulo-acinous pneumonia; Pleuritis hemorrhagico-exsudativa.
- 256 (c). "Bronchiolitis catarrh with some decayed masses as bronchial contents. Multiple Endoarteritis and Arteriolitis necroticans. Multiple acino-lobular pneumonia in hemorrhagico-exsudative form, at intercalary portions of lung. Pleural congestion.
- 256 (d). No significant changes. Endoarteritis et arteriolitis necroticans and perivascular acinous reactive hemorrhagic pneumonic places.
- 256 (e). Bronchiolitis catarrh. with some decayed masses as bronchiolar contents. Endoarteritis and Endoarteriolitis necroticans. Subpleural acino-lobular pneumonia, perifocal reactions. Papillous increase of bronchiolar or Alveolar epithels at intercalary portions of lung.
- 256 (f). No significant changes. Papillous increase of alveolar or bronchiolar epithels at intercalary portions of lung.

- 727 (a). Bronchiolitis catarrhalis with some decayed masses as bronchiolar contents. Endoarteritis and Endoarteriolitis necroticans. Lobular pneumonia with severe exudative-hemorrhagic perifocal changes.
- 727 (b). " Lobulo-acinous, hemorrhagic-exsudative pneumonia with caseous necrotic focus and cavern formations at some places.



[REDACTED]

731 (a). Bronchiolitis catarrh.
with some decayed masses
as bronchiolar contents.

Miliary glanders-knots with
severe hemorrhagic perifocal reac-
tions.

731 (b) [REDACTED]

Acino-lobular leucocytic pneumonia
with severe hemorrhagic perifocal
reactions.

[REDACTED]

[REDACTED]

[REDACTED]

I divide all cases into 2 groups:

- a) groups of perbronchial infection and
b) group of metastatic secondary pulmonary infection.

A). Perbronchial infection.

Investigation, based on only 4 cases of perbronchial infection (No. 176, 178, 229 and 731).

Perbronchial infection with somewhat large quantity of ganders-bacillus, cause after several weeks some pulmonary changes.

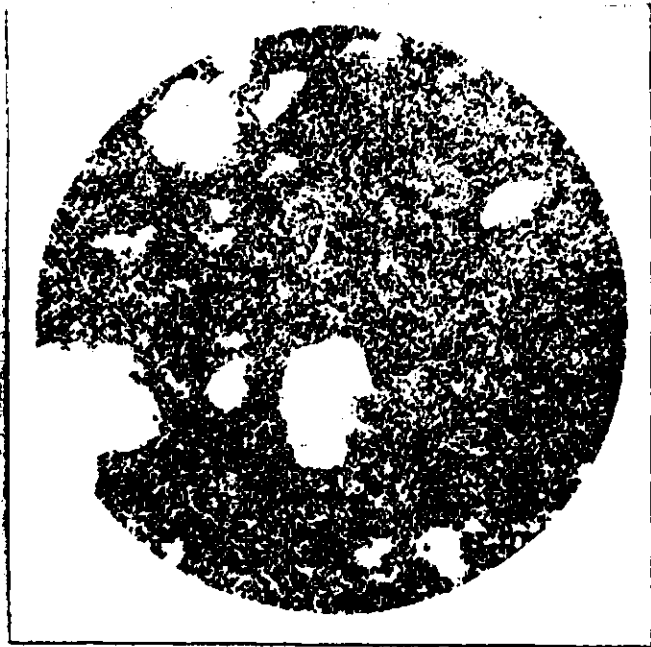
(I can not explain "the methods of infection and clinical symptoms" in details, while I have not received these records.)

- - - - -
") At first, it causes after some days or some weeks (in 1 case), considerable bronchiolitis catarrhalis.

[REDACTED]

4) Then in 1 case, some considerable reactive changes: pulmonal or pleural congestion.

[REDACTED]



No. 190.

(x60)

*) After 2 or 3 weeks (I can not indicate the days of course exactly), it causes some pneumonic changes:

- a) In 1 case, multiple peribronchiolar hemorrhagic pneumonia (Broncho-pneumonia in some peribronchiolar acinous parts), and some acino-lobular leucocytic pneumonia, due to peribronchiolar proceeding of changes.

No. 207



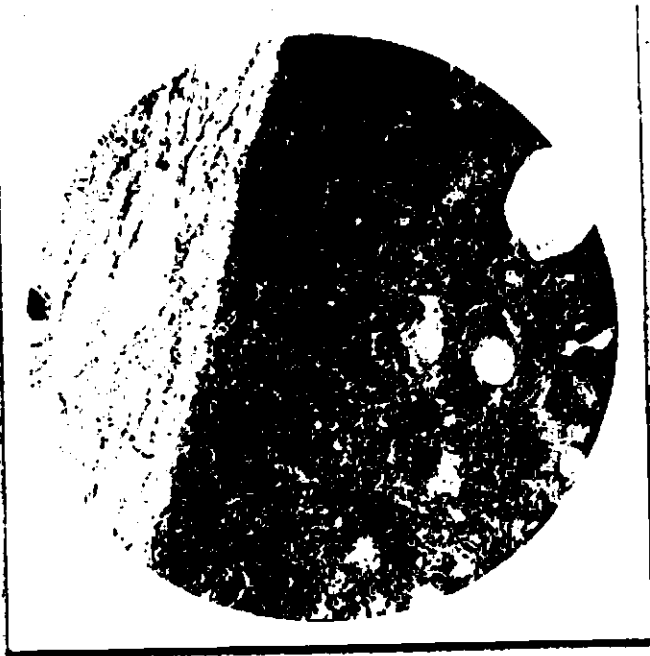
(X 30)

- b) In 1 case, multiple acino-lobular pneumonia with some glanders-knots formation and reactive Pleuritis (Intense Bronchiolitis and following acino-lobular pneumonia with some glanders-knots formation and reactive Pleuritis sere-fibrinosa).

[REDACTED]

[REDACTED]

No. 254 (4)



(x 60)

Accordingly the modus of primary lung infection, due to peribronchiolar infection are as following:

Infection. $\xrightarrow{\text{several days}}$ Bronchiolitis catarrhalis.

$\xrightarrow{\text{several days}}$ Pulmo-pleural congestion

$\xrightarrow{\text{2 - 3 weeks?}}$ Broncho-pneumonia or acino-lobular pneumonia

*sometimes with glanders-knots for-

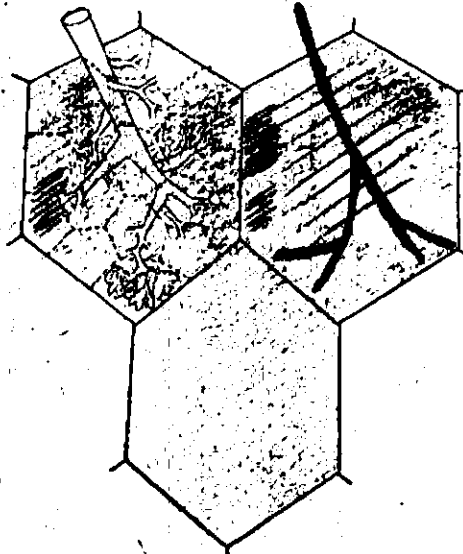
[REDACTED]

[REDACTED]

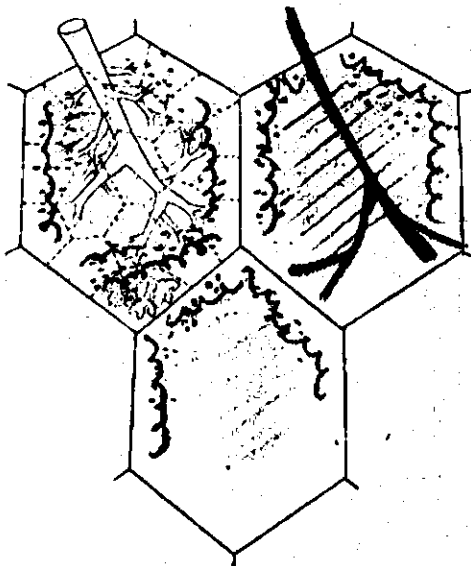
[REDACTED]

* sometimes with some reactive pleural changes.

[REDACTED]



[REDACTED]

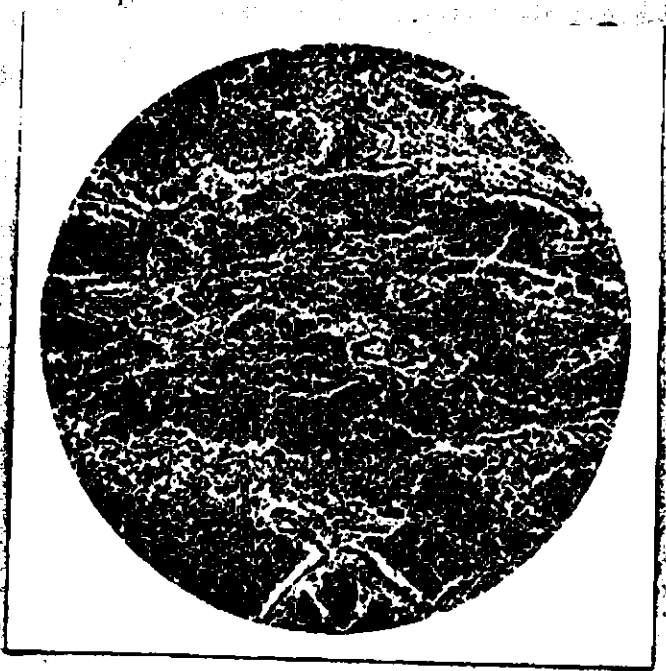
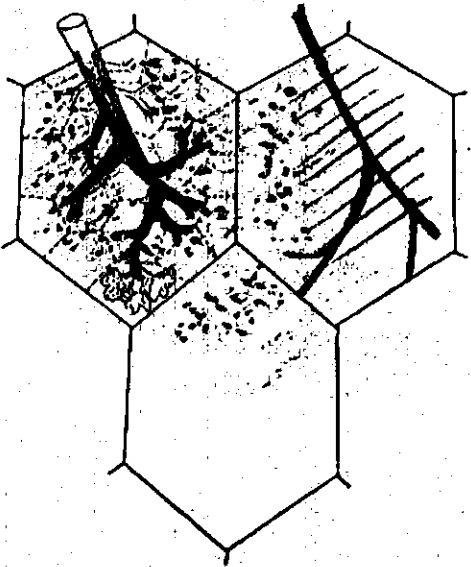


Rather exsudative.

Rather productive.

(Edema and bacterial disseminations)

(Some increased Alveolar epithel cells).



[REDACTED]

No. 256

(X84)

[REDACTED]

114

[REDACTED]

B) Secondary Pulmonal infection. [REDACTED]

Infected wounds (owing to glanders- infection) cause sometimes metastatic secondary pulmonal infection.

All microscopically investigated 7 cases.

a) Without any remarkable reactive pulmonal changes in 2 cases.

No. 222. Slight pulmonal congestion.

No. 224. Pulmonal congestion and edema.

b) With some diffuse Alveolitis.

(Leucocytes- or lymphocytes- infiltration in alveolar walls, accompanied with considerable pulmonal edema and congestion).

Some times with bacterial disseminations. in 5 cases.

No. 180. Considerable pulmonal congestion and edema with some bacterial disseminations.

No. 16. Bronchiolitis catarrhalis and slight diffuse Alveolitis with some bacterial disseminations.

No. 152. Considerable diffuse Alveolitis and pulmonal edema.

No. 167. (a) Slight Alveolitis and atelectasis, accompanied with subpleural congestion, slight hemorrhages and fibrous separation.

No. 190. Round cell infiltration in alveolar walls and some hyperplasia of alveolar epithel cells. (namely in rather chronic course).

[REDACTED]

[REDACTED]

[REDACTED]

B). Sometimes occurred metastatic severe inflammation of arterioles, due to bacteraemia;

[REDACTED]

Endarteritis or Endarteriolitis necroticans.

(Necrotic ruins of blood-vessels-walls with extraordinary plenty decayed cellular masses-embolus)

and following inflammations of alveolar walls:

(Diffuse Alveolitis).



No. 207.

(X20)



No. 256

(X40)

C). Then diffuse Alveolitis (some times with Endarteriolitis) proceed to

- a) Military knots formations (without reactive, exsudative-hemorrhagic, acino-lobular, changes.)
- b) Multiple acino-lobular pneumonia, and

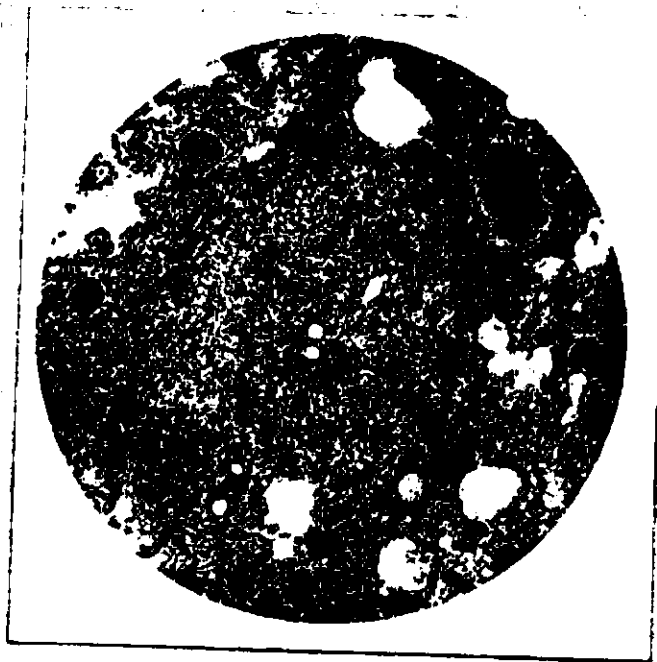
[REDACTED]

c) With both changes: military knots formation and severe reactive, acino-lobular pneumonia.

[REDACTED]



No. 254 (x80)



No. 50 (x70)



No. 256 (x60)



No. 227 (x60)

[REDACTED]

[REDACTED] 117

[REDACTED]

a) Military knots formation, without reactive pneumonic changes in the neighboring pulmonary tissues, in 4 cases.

[REDACTED]

No. 254. Glanders-knots in somewhat proliferative form. Multiple Miliar and supermiliar glanders-knots, mainly at the intercalary portions of lung. With slight proliferative perifocal reactions: some hyperplasia of alveolar epithelium.

No. 205 (A) Glanders-knots formation without remarkable perifocal reactions.

No. Endarteriolitis necroticans and multiple supermiliary glanders-knots.

b) Military knots are attended sometimes furthermore with (multiple acino-lobular or lobular) pneumonic changes, as reactive exsudative reactions. in 4 cases.

No. 256 (g) Multiple military glanders-knots in hemorrhagic-leucocytic form, with severe exsudative perifocal reactions.

No. 205 (b) (b) Endarteriolitis necroticans and multiple supermiliary glanders knots with remarkable hemorrhagic

[REDACTED]

[REDACTED]

118

[REDACTED]

perifocal changes and slight pleu-
ral congestion.

[REDACTED]

No. 207. Endoarteriolitis necroticans and
(a) multiple supermiliary glanders-
knots with slight hemorrhagic
perifocal reactions, attended
with some acino-lobular pneumonic
changes.

No. 254. Multiple supermiliary glanders knots
(b) and multiple acino-lobular hemorr-
hagic-leucocytic pneumonia with
severe exsudative perifocal changes
and following pleuritis hemorrhagica.

c) Diffuse Alveolitis proceed to multiple acino-
lobular or lobular pneumonia, sometimes accompanied
with miliary glanders-knots (as described in b)
and sometimes not. in 4 cases.

1) No. 256. Endoarteriolitis necroticans and
(c) multiple acino-lobular pneumonia
in hemorrhagic-exsudative form,
accompanied with pleuritis hemorr-
hagico-exsudative.

No. 256. Multiple lobulo-acinous pneumonia
(b) and pleuritis hemorrhagica.

2) No. 221. Lobular pneumonia and reactive
(a) perifocal inflammatory edema,

[REDACTED]

accompanied with Pleuritis sero-fibrinosa and Bronchiolitis Catarrhalis gravis.

[REDACTED]

3) No. 146. Lobular pneumonia (sometimes (h.m.) catarrhalic-exsudative, sometimes hemorrhagic-leucocytic) and Bronchiolitis catarrhalis gravis, accompanied with diffuse pulmonal stasis in other pulmonal tissues.

3) No. 727. Endoarteriolitis necroticans and (a) lobular pneumonia with severe exsudative-hemorrhagic perifocal changes. accompanied with some Bronchiolitis catarrhalis.

d) After several weeks, pneumonic places fall into necrosis or caverns, in 1 case.

No. 727. Lobulo-acinous pneumonia in hemorrhagic-exsudative form fall into caseous necrotic masses at focal parts and furthermore caverns-formation.

Accordingly the developing-mode of exsudative-hemorrhagic pulmonal changes are as following:

[REDACTED]

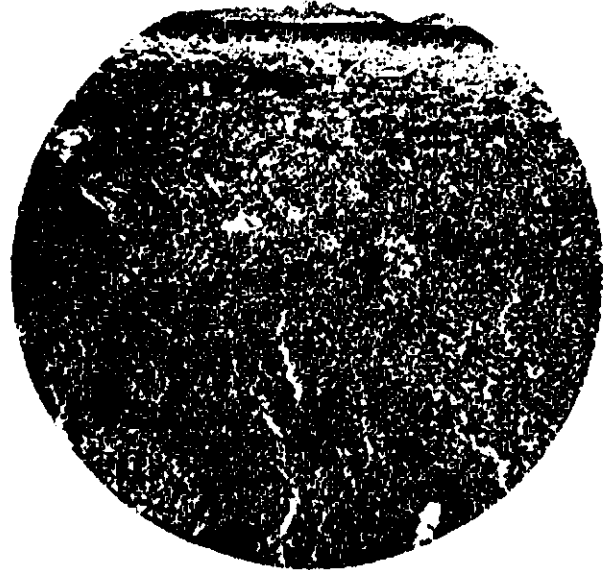
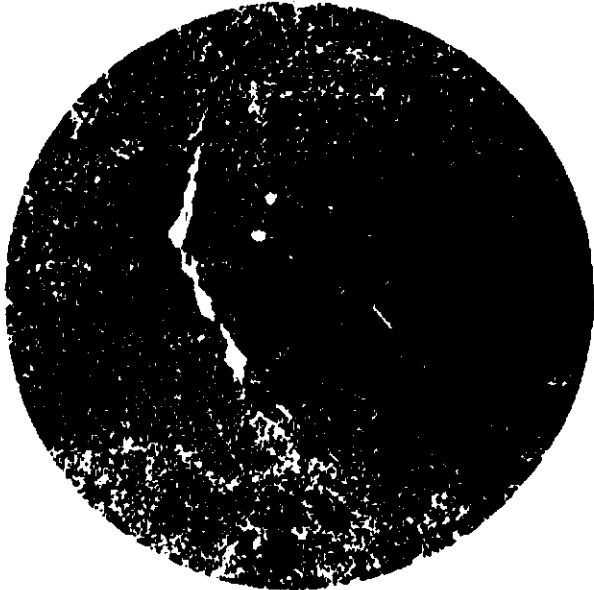
(1). Diffuse Alveolitis.



(II) Acino-lobular pneumonia.

[REDACTED]

Reactive Pleuritis.

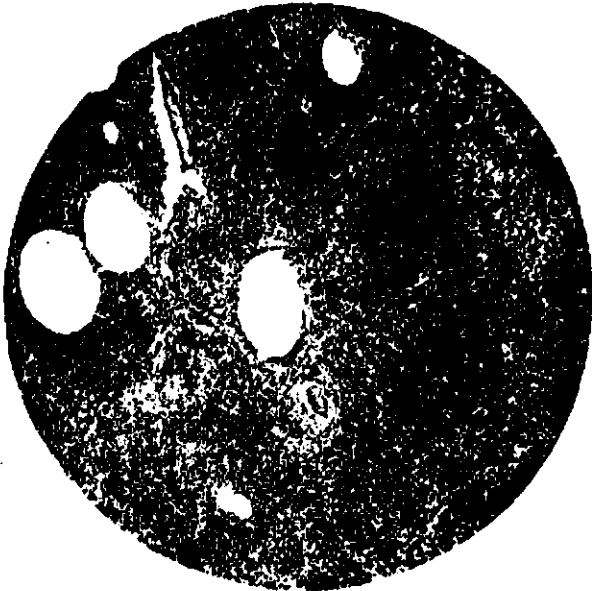


Several days.

(III) Lobular pneumonia.

No. 221

x64



← No. 146

~~No. 127~~

(X 33.5)

Several weeks?

(IV) Caseous necrotic changes with cavern [REDACTED]

[REDACTED]

[REDACTED] 121

No. 727



(X 64.)

f). on the other hand, exsudative changes are attended gradually with somewhat proliferative reactions, namely slight or remarkable hyperplasia of alveolar epithel cells.

- No. 221 (b) Multiple acinous or acino-lobular pneumonia with severe exsudative-hemorrhagic perifocal reactions, accompanied with slight hyperplasia of alveolar epithel cells.
- No. 190 Congestion pulmonum in high degree and some round-cell-infiltration in alveolar walls, accompanied with somewhat hyperplasia of alveolar epithel cells. (Alveolitis productive).
- No. 167 Obsolete hemorrhagic pneumonia (acinous-lobular), organised with remarkably increased alveolar epithel cells.
- No. 254 (a) Multiple miliary or supermiliary glanders-knots with slight proliferative walls (slight increase of

No. 221
(c)

[REDACTED]

alveolar epithel cells at perifocal portions).
Multiple acious or acino-lobular pneumonia with multiple glanders knots (in rather productive form) at the intercalary portions of lung.

These pneumonic places are in rather productive form: focal necrotic caseous parts and perifocal somewhat productive walls with some hyperplasia of alveolar epithel cells and some giant cell formation.

No. 256
(e)

Endoarteriolitis necroticans and subpleural acino-lobular pneumonia with some exsudative-hemorrhagic perifocal reactions, accompanied with papillar increase of bronchiolar or alveolar epithel cells at the intercalary portions of lung.

No. 256
(f)

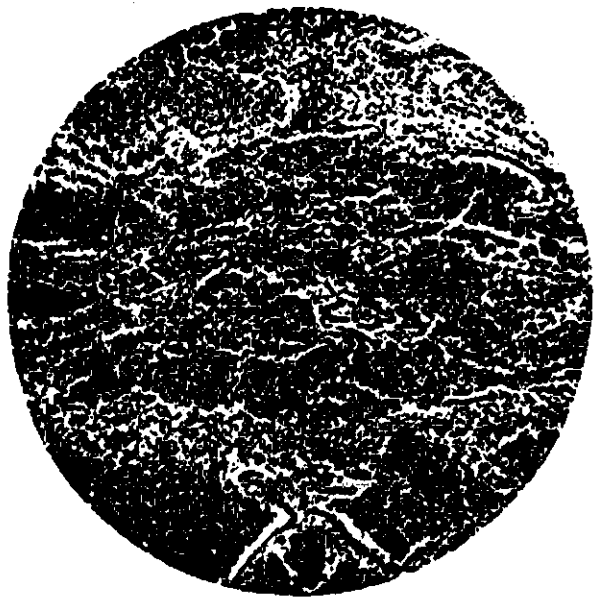
Remarkable hyperplasia of alveolar or bronchiolar epithel cells (papillar increase) at the intercalary portion of lung, without any significant inflammatory signs.

Accordingly the developing mechanisms of productive pulmonal changes by glanders-disease are as followed:

- 1) Exsudative-hemorrhagic changes.
- 2) Slight hyperplasia of alveolar epithel cells.

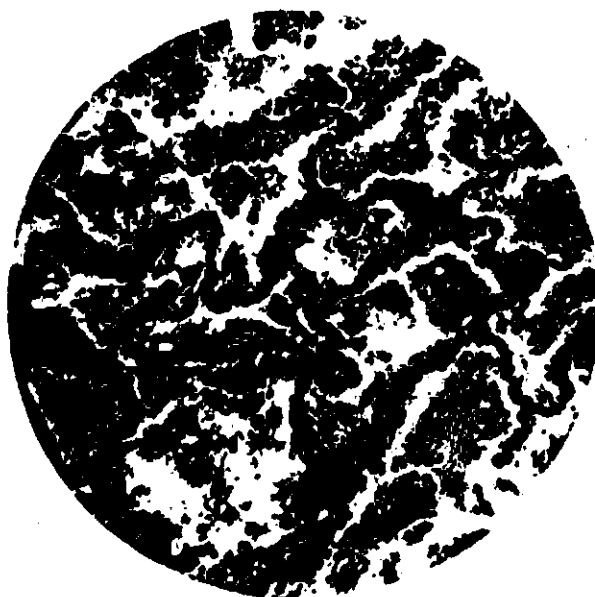
a) In acino-lobular pneumonic parts.

b) In so-called diffuse Alveolitis.
(Alveolitis productive)



No. 256

(x80)



No. 227

(x100)

3) Remarkable hyperplasia of alveolar epithelial cell.

a) Obsolete hemorrhagic pneumonia, organized with remarkable hyperplasia of alveolar epithelial cells and some giant cell formation.



No. 167

(x80)

b) Rather productive glandular-knots formation. Remarkable hyperplasia of alveolar epithelial cells and some giant cell formation.

[REDACTED]

4) Intense hyperplasia of alveolar epithel cells, especially at the intercalary portion of lung.

[REDACTED]

Remarkable reactive hyperplasia (papillar increase) of alveolar or bronchiolar epithel cells at the intercalary portions of lung, due to chronic affection of lung.

Generally alveolar epithel cells at the intercalary portions are apt to increase easily.

(Such remarkable papillar increase occurs scarcely in other diseases).



No. 256

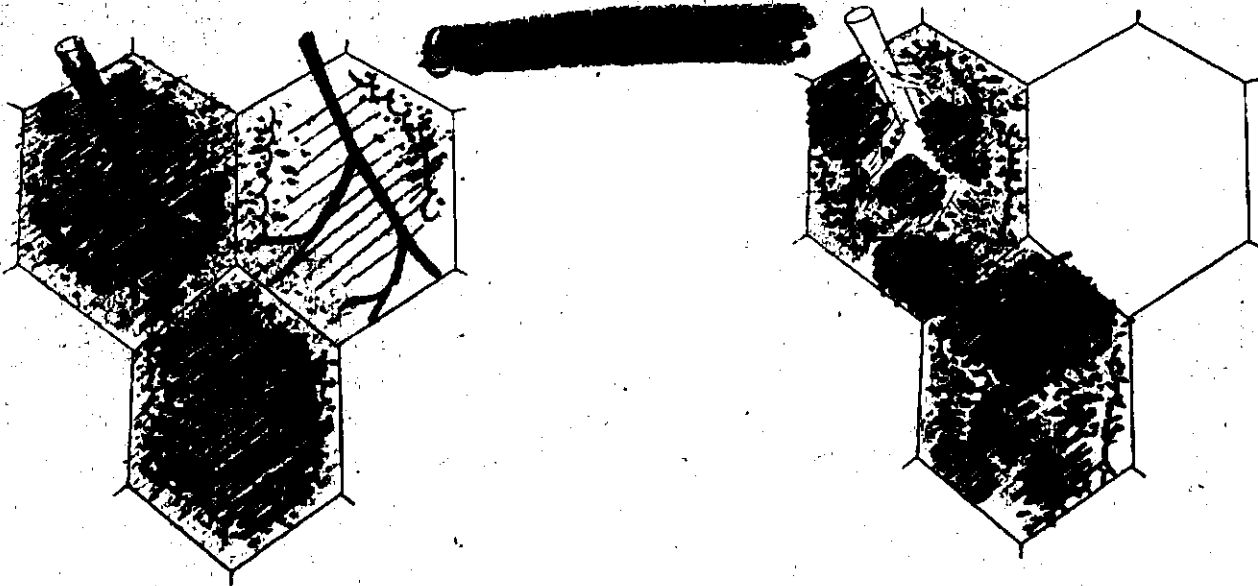
(x 64)

g) Even in one and the same individual occurred some different various pulmonal changes, some places hemorrhagic-exsudative and some places rather productive: may be, due to the days of each pulmonal changes.

[REDACTED]

1) No. 221 (b)
Acino-lobular pneumonia in
exsudative-hemorrhagic form.

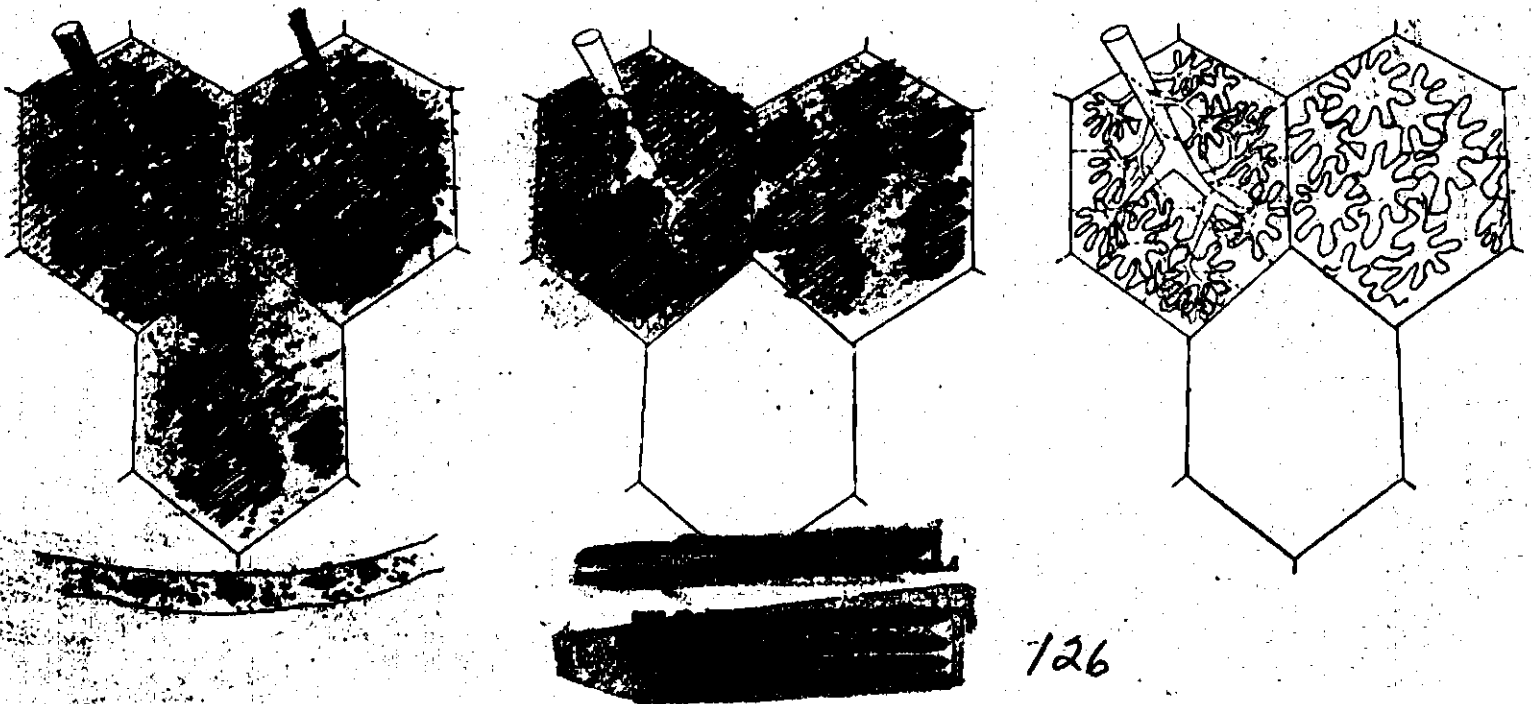
No. 221 (c)
Multiple productive glanders-
knots formation.



2) No. 256 (b)
Lobule-acinous pneumo-
nia in exs.-hem. form

No. 256 (e)
Acino-lobular
pneumonia with
papillar increase
of alv. epithel.

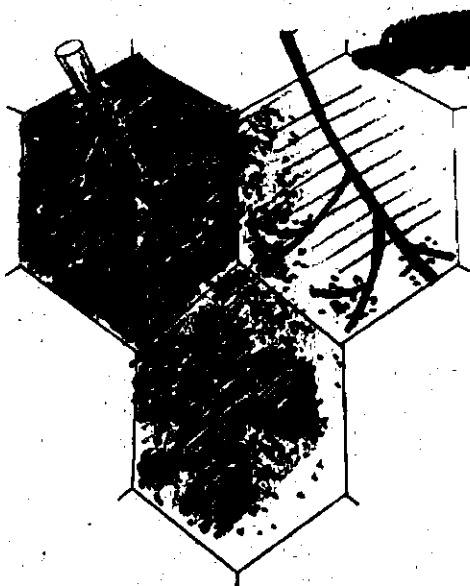
No. 256 (f)
Remarkable papillar
increase of alv.
epith.



[REDACTED]

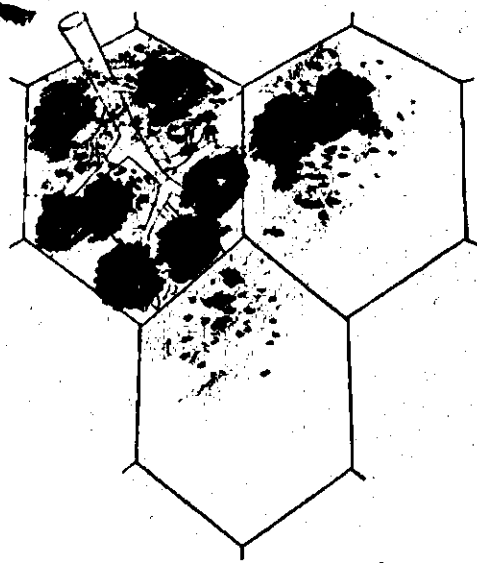
3) No. 254 (b)

Multiple miliary glanders-knots, with severe exsudative hemorrhag. perifocal reaction.

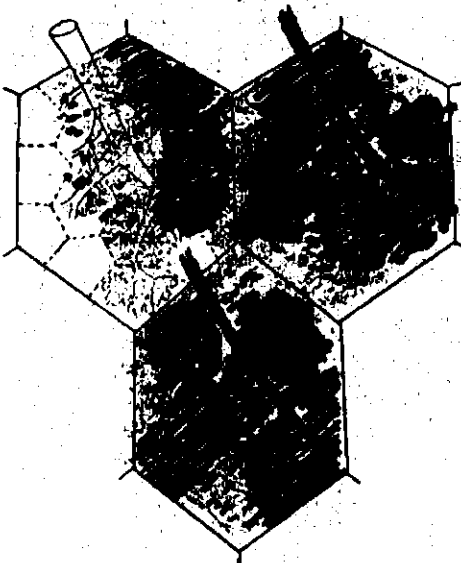


No. 254 (a)

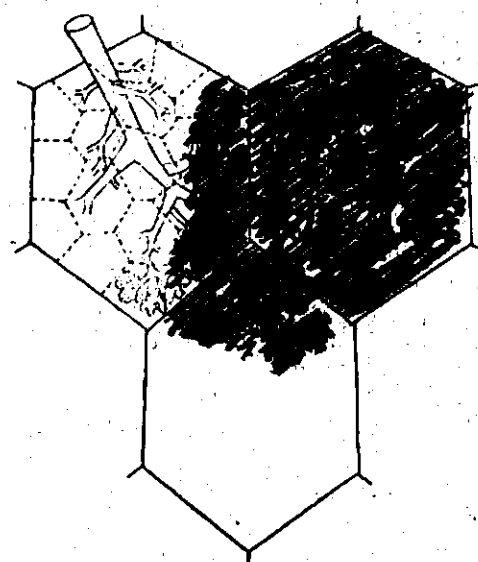
Multiple miliary glanders-knots, without severe perifocal reactions.



4) No. 167 (c)
Multiple lobular pneumonia in exsud, hemorrhag, form.



No. 167 (b)
Multiple hemorrhagic pneumonia, organised with some hyperplasia of alveolar epithel cells.



[REDACTED]

[REDACTED]

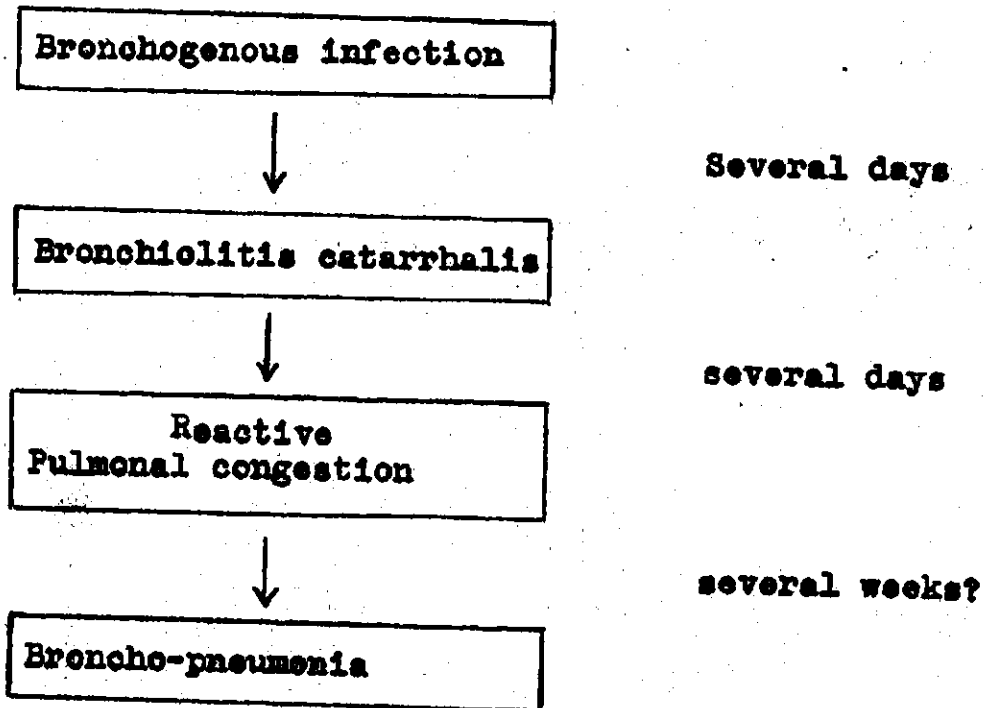
(3)

The classification of general courses of pulmonal changes.

1. Divide all cases into 2 groups:

1) Bronchogenous and 2) hæmatogenous infection.

1) Course of bronchogenous infection.



* Sometimes with pleural reaction.

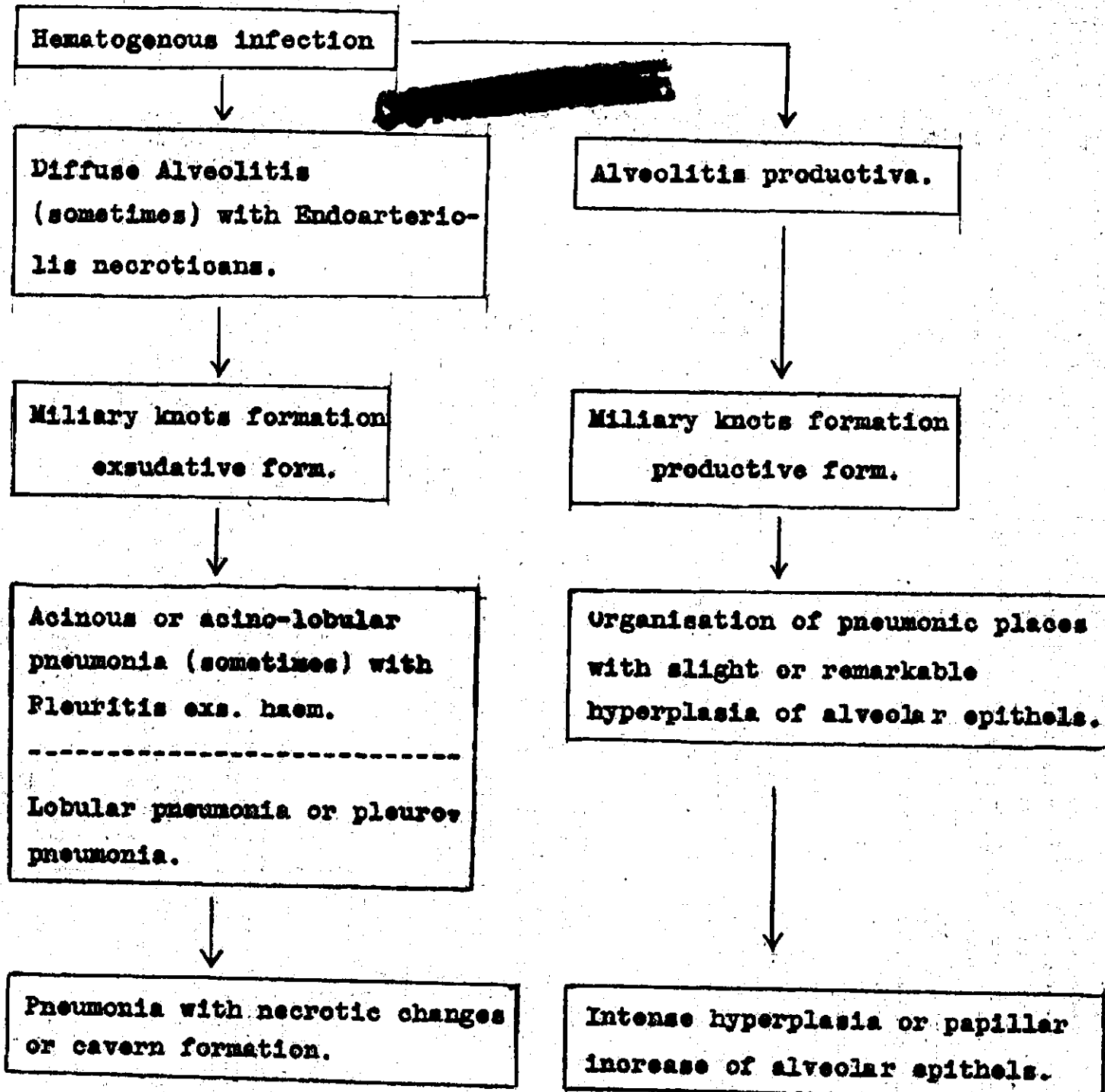
* Sometimes with glanders knots formation $\left\{ \begin{array}{l} \text{exsudative form.} \\ \text{productive form.} \end{array} \right.$

2) Course of hematogenous infection.

I divide all these cases into 2 forms: 1) exsudative form and 2) rather productive form.

A) Exsudative form.

B) Productive form.



LUNG

		1	2	3	4	50	146	152	167	176	178		
Alveoli	Alveolar Spaces	Emphysema	-	-	+	-	-	-	-	-	-		
		Atelectasis	+	+	+	+	+	+	+	+	+	+	
		Necrosis or Glander-knots	-	-	-	+	-	-	-	+	+	+	
		Edema	#	+	#	+	+	+	+	+	+	+	
		Erythrocytes	+	(+)	+	(#)	(+)	+	+	+	+	(+)	
		Leucocytes	-	+	-	+	-	+	+	+	+	(+)	
		Lymphocytes	+	+	+	+	-	-	+	+	+	(+)	
		Desquamated Epithelial Cells	+	+	+	+	+	+	+	+	+	(+)	
		Heart Disease Cells	-	-	-	-	+	+	+	+	+	(+)	
		Fibrin	-	+	-	-	+	+	+	+	(+)	+	
		Colonies of Bacterium	+	-	-	-	+	+	+	+	+	(+)	
		Alveolar Walls	Swelling	+	+	+	+	+	+	+	+	+	+
			Hyperplasia of Wall Cells	+	+	+	+	+	+	+	+	+	+
			Erythrocytes in Capillaries	+	+	+	+	+	+	+	+	+	+
Leucocytes in Capillaries	+		+	+	+	+	+	+	+	+	(+)		
Lymphocytes in Capillaries	+		+	+	+	+	+	+	+	+	+		
Bronchioli	Contents	Secretion of Mucus	+	+	+	+	+	+	+	+	+		
		Desquamated Epithelium	+	+	+	+	+	+	+	+	+	+	
		Erythrocytes	+	-	-	(#)	-	-	-	-	+	+	
		Leucocytes	+	+	-	+	+	+	+	+	+	+	
		Lymphocytes	+	+	-	+	+	+	+	+	+	+	
		Fibrin	-	+	-	-	+	+	+	+	(+)	+	
		Colonies of Bacterium	+	+	-	(+)	-	-	-	-	-	-	
		peribronchial Tissues	Congestion	+	+	+	#	+	+	+	+	+	+
			Edema	+	+	+	+	+	+	+	+	+	+
			Hemorrhage	-	-	-	(+)	-	-	-	-	-	(+)
Infiltration Leucocytes	-		-	-	-	-	-	-	-	-	(+)		
Lymphocytes	-		-	-	-	-	-	-	-	-	-		
Blood Vessels	perivascular Tissues	Proliferation of Histiocytic Cells	-	+	+	+	+	+	+	+	+		
		Erythrocytes	#	#	#	#	#	#	+	+	+	+	
		Leucocytes	-	+	(+)	+	+	+	+	+	+	(+)	
		Lymphocytes	+	+	(+)	+	+	+	+	+	+	(+)	
		Monocytes	+	+	(+)	+	+	+	+	+	+	(+)	
		Edema	+	+	+	+	+	+	+	+	+	+	
		Hemorrhage	-	-	-	(#)	-	-	-	-	-	+	
		Infiltration Leucocytes	+	+	(+)	+	+	+	+	+	+	(+)	
		Lymphocytes	+	+	(+)	+	+	+	+	+	+	(+)	
		Proliferation of Histiocytic Cells	+	+	+	+	+	+	+	+	+	+	
Pleura	Pleural Tissues	Covering Masses	-	-	-	+	-	-	-	+	+		
		Thickening	+	-	-	+	+	+	+	+	+	+	
		Edema	-	-	+	+	+	+	+	+	+	+	
		Congestion	-	-	+	+	+	+	+	+	+	+	
		Hemorrhage	-	-	-	+	-	-	-	-	+	+	
		Infiltration Leucocytes	-	-	-	(+)	+	+	+	+	+	+	
		Lymphocytes	-	-	-	+	+	+	+	+	+	+	
Proliferation of Histiocytic Cells	-	-	-	+	+	+	+	+	+	+			

LUNG

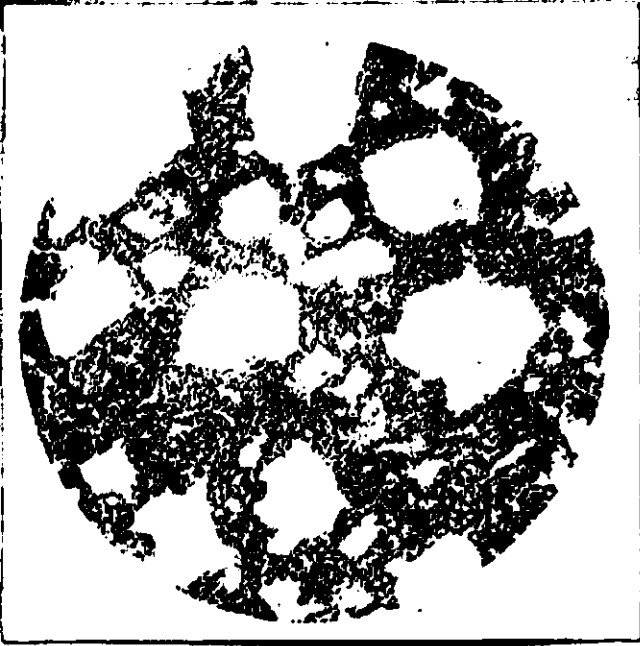
		180	190	193	205	207				221			222	224		
Alveoli	Alveolar Spaces	Emphysema	-	-	-	-	-	-	-	-	-	-	-	-		
		Atelectasis	-	+	-	-	+	+	+	+	+	+	+	+	+	
		Necrosis or Glander-knots	-	-	+	-	+	+	+	+	+	+	+	+	+	
		Edema	#	+	#	#	+	#	+	+	#	(#)	#	+	#	
		Erythrocytes	+	+	+	+	+	+	(+)	+	+	+	+	+	+	
		Leucocytes	+	+	+	+	+	(+)	(+)	(+)	+	+	+	+	+	
		Lymphocytes	+	+	+	+	+	(+)	+	+	+	+	+	(+)	+	
		Desquamated Epithelial Cells	+	+	-	+	+	+	(+)	(+)	+	+	+	(+)	+	
		Heart Disease Cells	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Fibrin	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Colonies of Bacterium	+	-	-	+	-	-	-	-	-	+	-	-	-	
		Alveolar Walls	Swelling	+	#	+	#	+	+	+	+	+	+	+	+	+
			Hyperplasia of Wall Cells	-	+	-	-	-	-	-	-	-	-	+	+	+
			Erythrocytes in Capillaries	#	#	#	#	+	#	+	(+)	+	#	+	#	#
Leucocytes in Capillaries	+		+	-	+	+	+	+	+	+	+	(+)	+	+		
Lymphocytes in Capillaries	+		+	+	-	(+)	+	+	+	+	+	+	+	+		
Bronchioles	Contents	Secretion of Mucus	+	-	(+)	-	(+)	+	+	-	-	-	+	+		
		Desquamated Epithelium	#	+	+	-	(+)	+	+	(+)	-	-	-	-		
		Erythrocytes	+	+	-	-	+	+	+	(+)	-	-	-	-		
		Leucocytes	+	+	-	-	+	+	+	+	-	-	+	+		
		Lymphocytes	+	-	-	-	-	-	-	-	-	-	+	(#)		
		Fibrin	-	-	-	-	-	-	-	-	-	-	-	+		
	Colonies of Bacterium	-	-	-	+	-	-	-	-	-	-	+	(#)			
	Peribronchial Tissues	Congestion	-	#	#	#	-	#	+	+	-	-	+	+		
		Edema	#	+	+	#	+	#	+	+	+	+	+	+		
		Hemorrhage	-	-	+	+	+	+	+	+	-	-	+	+		
Infiltration		+	+	+	+	+	+	+	+	+	+	+	+			
Blood Vessels	Contents	Erythrocytes	#	#	#	#	#	#	#	#	#	#	+			
		Leucocytes	(#)	+	-	-	+	(#)	(#)	-	+	+	+	+		
		Lymphocytes	+	+	-	-	-	-	-	-	-	-	-	-		
	Perivascular Tissues	Monocytes	+	+	-	-	+	+	+	+	+	+	+	+		
		Edema	+	-	+	#	+	#	#	+	+	+	+	+		
		Hemorrhage	-	-	+	+	+	+	+	+	+	+	+	+		
		Infiltration	+	+	+	+	+	+	+	+	+	+	+	+		
	Pleura	Pleural Tissues	Leucocytes	-	+	-	-	+	(#)	-	-	+	+	+		
			Lymphocytes	-	+	-	-	-	-	-	-	-	-	-		
		Proliferation of Histiocytic Cells	-	+	-	-	-	-	-	-	+	+	+	+		
Covering Masses		Edema	-	-	-	-	-	-	-	-	-	-	-	-		
		Thickening	-	-	-	-	-	-	-	-	-	-	-	-		
		Congestion	+	#	#	#	#	#	#	#	#	#	#	#		
		Hemorrhage	-	-	+	+	+	+	+	+	+	+	+	+		
	Infiltration	+	+	+	+	+	+	+	+	+	+	+	+			
Proliferation of Histiocytic Cells	-	+	-	-	-	+	(+)	-	-	-	-	-				

LUNG

		220	254	256	927	931
Alveoli	Emphysema	-	-	-	-	-
	Atelectasis	-	-	-	-	-
	Necrosis of Glander-knots	#	#	+	+	+
	Edema	#	+	+	+	+
	Erythrocytes	#	+	+	+	+
	Leucocytes	+	+	+	+	+
	Lymphocytes	+	+	+	+	+
	Desquamated Epithelial Cells	#	+	+	+	+
	Heart Disease Cells	+	+	+	+	+
	Fibrin	+	+	+	+	+
	Colonies of Bacterium	-	-	-	-	-
	Swelling	#	+	+	+	+
	Hyperplasia of Wall Cells	+	+	+	+	+
	Erythrocytes in Capillaries	#	+	+	+	+
Leucocytes in Capillaries	+	+	+	+	+	
Lymphocytes in Capillaries	+	+	+	+	+	
Bronchioles	Secretion of Mucus	-	-	-	-	-
	Desquamated Epithelium	+	+	+	+	+
	Erythrocytes	+	+	+	+	+
	Leucocytes	+	+	+	+	+
	Lymphocytes	+	+	+	+	+
	Fibrin	-	-	-	-	-
	Colonies of Bacterium	-	-	-	-	-
	Congestion	#	+	+	+	+
	Edema	+	+	+	+	+
	Hemorrhage	+	+	+	+	+
	Infiltration Leucocytes	+	+	+	+	+
	Lymphocytes	+	+	+	+	+
	Proliferation of Histocytic Cells	+	+	+	+	+
	Blood Vessels	Erythrocytes	#	+	+	+
Leucocytes		+	+	+	+	+
Lymphocytes		+	+	+	+	+
Monocytes		+	+	+	+	+
Edema		+	+	+	+	+
Hemorrhage		+	+	+	+	+
Infiltration Leucocytes		+	+	+	+	+
Lymphocytes		+	+	+	+	+
Proliferation of Histocytic Cells		+	+	+	+	+
Pleura		Covering Masses	+	+	+	+
	Thickening	+	+	+	+	+
	Edema	+	+	+	+	+
	Congestion	+	+	+	+	+
	Hemorrhage	+	+	+	+	+
	Infiltration Leucocytes	+	+	+	+	+
	Lymphocytes	+	+	+	+	+
	Proliferation of Histocytic Cells	+	+	+	+	+

~~_____~~
Congestion and edematous swelling of
alveolar walls.

~~_____~~
No. 178



(X 60)

Diffuse Alveolitis with some leucocytes
emigration.

No. 22/ (t)



(X 100)

[REDACTED]

Bronchiolitis and Peribronchiolitis gravis.

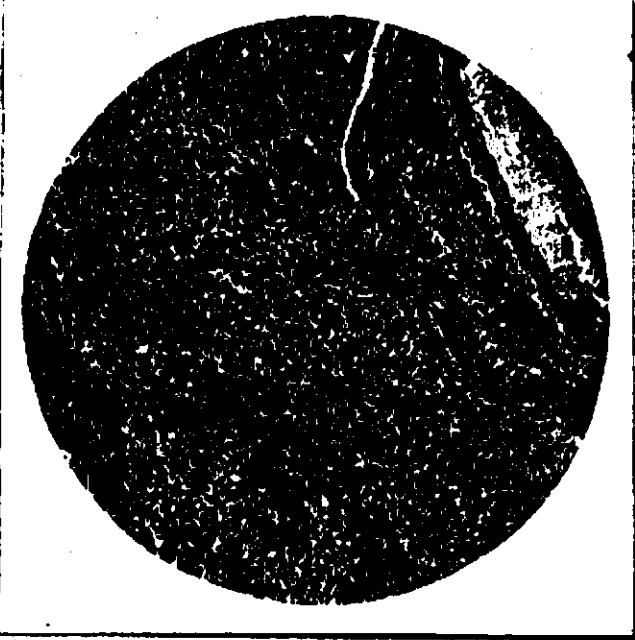


[REDACTED]

No. 207 (c)

(x30)

Bronchitis catarrhalis gravis with massive desquamated epitheliums.



No. 256 (b)

(x80)

[REDACTED]

~~_____~~
Endoarteriitis necroticans.



~~_____~~
No. 207 (a)

(x 20)

Endoarteriitis necroticans, in high power.



No. 167 (c)

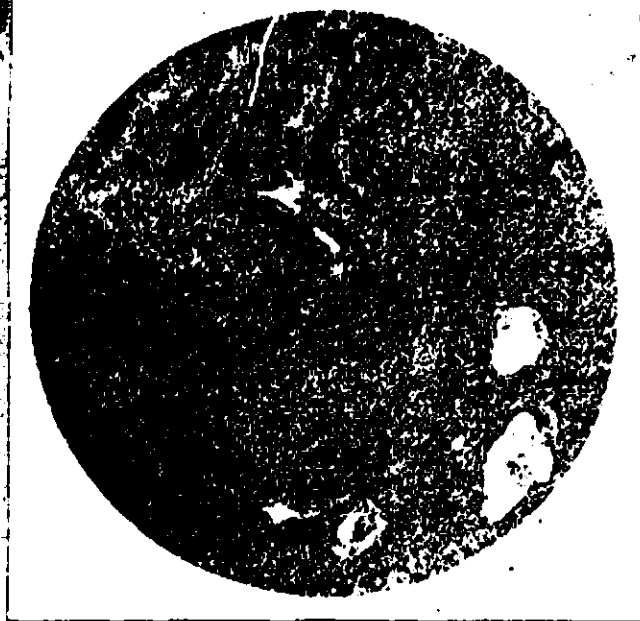
(x 60)

[REDACTED]

Endoarteritis necroticans and
diffuse hemorrhages in the neighboring
pulmonary tissues.

No. 256 (c)

(x 40)



[REDACTED]

Miliary exudative glanders-knot, in high power.



No. 205 (b)

(x20)

Miliary exudative glanders-knot.
Leucocytic-exudative peripheral zone of knot, in high power.



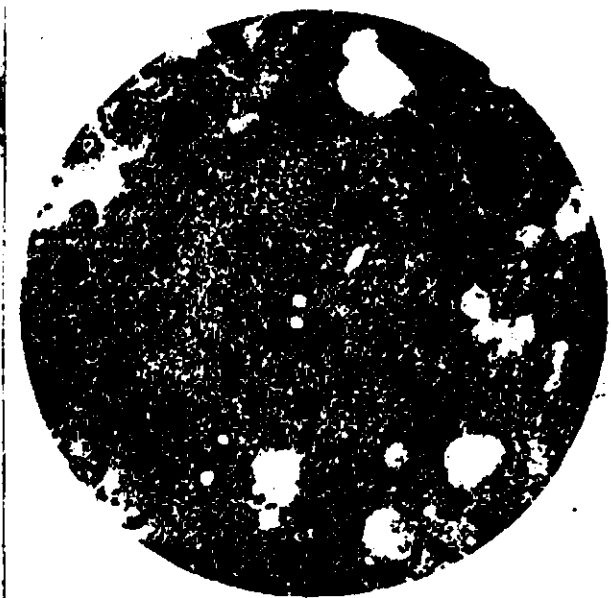
No. 256 (a)

(x60)

[REDACTED]

[REDACTED] 737

~~XXXXXXXXXX~~
Military glanders-knot in rather exudative form.



No. 50

(x70)

Military glanders-knot in rather exudative form, with intense perifocal reaction.



No. 193(a)

(x20)

[REDACTED]

Endoarteritis necroticans and pneumonic changes in the neighbouring pulmonic tissues.

[REDACTED]

No. 221 (b)

(X 60)

Endoarteriolitis obliterans.
Intense thickening of walls of arteriole, accompanied with remarkable round cell accumulation in intima.

No. 221 (c)

(X 180)

[REDACTED]

Miliary glanders-knot, in rather
productive form.
Without any perifocal reaction.

[REDACTED]



No. 254(a)

(X 80)

Some miliary glanders-knots with central
caseous focus.



No. 254(a)

(X 20)

[REDACTED]

[REDACTED]

Miliary glanders-knot at the intercalary
portion of lung.

[REDACTED]



No. 22/ (c)

(X60)

Diffuse alveolitis with some congestion
and some inflammatory edema, accompanied
with slight hyperplasia of alveolar
epitheliums.



No. 190

(X60)

[REDACTED]

Lobular pneumonia with some increased
alveolar and bronchiolar epitheliums.

[REDACTED]

No. 256 (e)

(X 80)

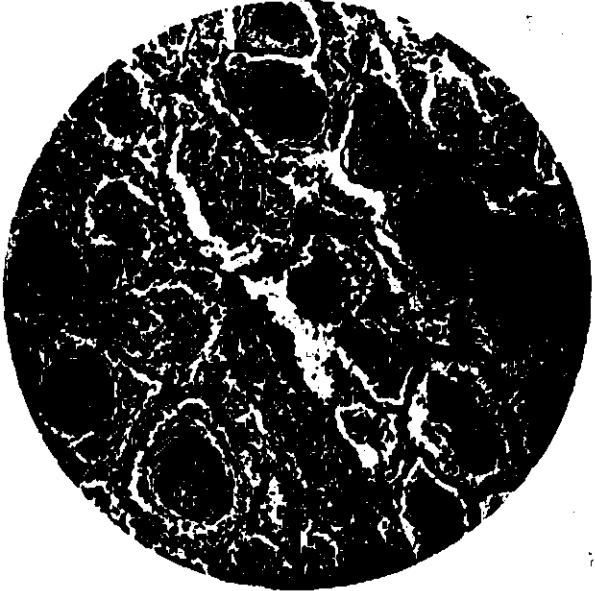
Papillar hyperplasia of alveolar epitheliums
in lobular pneumonic places, due to
chronic course.

No. 256 (f)

(X 60)

[REDACTED]

Some proliferative changes, accompanied with slight hyperplasia of alveolar epitheliums.



No. 167 (b) [REDACTED]

(X80)

Lobular pneumonia in slight carnification.



No. 167 (b)

(X80)

[REDACTED]

[REDACTED]

Acino-lobular, hemorrhagic-exudative
pneumonia, in severe degree.



No. 167 (c)

[REDACTED]

(x60)

Lobular pneumonia, leucocytic-hemorrhagic.
Some pleural congestion.



No. 221 (a)

(x60)

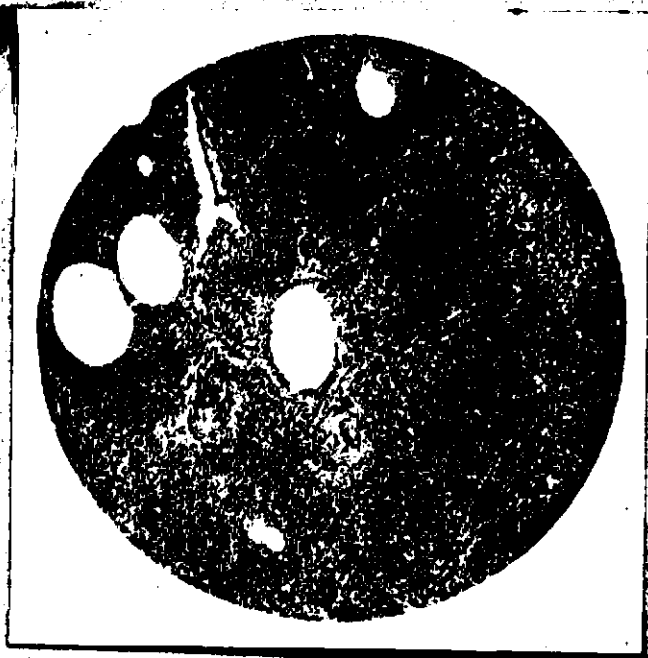
[REDACTED]

[REDACTED]

Lobular pneumonia, leucocytic-hemorrhagic.
In severe degree.

No. 146

[REDACTED]



(x30)

Lobular pneumonia with cavern formation.
Intense exudative form.

No. 127(4)



(x60)

[REDACTED]

[REDACTED]

Pleuritis fibrino-haemorrhagica.



No. 254 (8)

[REDACTED]

(x60)

[REDACTED]

[REDACTED]

146



Tonsil



847

[REDACTED]

T O N S I L

(A) Microscop. Investigation [REDACTED]

16.

In lacuna, desquamated epitheliums, fibrinous masses and some erythrocytes and edematous swelling of mucous membrane with slight localised necrosis. Slight hyperplasia of follicles and germinative centres with slightly increased and slightly swollen reticulum-fibres and some leucocytes, some lymphocytes and etc.

In submucous tissues: remarkable congestion, edematous swelling of capillary-walls and fibrinous separation, with remarkable leucocytes and lymphocytes infiltrations.

In other general tissues, slight edema, considerable congestion and slight plasma-cells and lymphocytes infiltration.

50.

Remarkable edematous swelling and leucocytes infiltration in mucous layers with some localised necrosis which spreads furthermore to the submucous tissues. In such necrotic parts exist massive bacterial accumulation, fibrinous masses, plenty of leucocytes and some lymphocytes. Remarkable congestion, edematous and at some places hyalinous swelling of capillary walls (desquamation and swelling of capillary endothel-cells), and remarkable edema in mucous tissues.

In lymph-follicles exist edematously swollen reticulum-fibres with some increased makrophagen and epitheloid cells.

In general tissues, edematous swelling and some lymphocytes-infiltration. In crypt, some desquamated epitheliums, fibrinous and bacterial masses.

[REDACTED] 48 [REDACTED]

[REDACTED]

193.

In crypt, desquamated epitheliums, ~~fibrous~~ and bacterial masses. Edematous swelling of mucous membrane. Reactive hyperplastic lymph-follicles with some lymphocytes and plasma-cells-emigration in the neighbouring tissues diffusely and slight congestion and edematous swelling of capillary-walls in surrounding connective tissues.

In submucous tissues, at some places remarkable congestion and partial hemorrhages with remarkable plasma-cell-infiltration and fibrinous separation in connective tissues-slits.

152.

desquamated epitheliums in crypts and slight edematous swelling of mucous membranes.

Slight hyperplasia of lymph-follicles and slightly increased reticulum-fibres (lymphfollicles in reticular form Ohno's) with slight edematous swelling of reticulum-fibres and fibrinous separations.

Slight edema in submucous tissues and no remarkable changes else.

190.

Slight swelling and partial localised necrosis of mucous tissues and desquamated epitheliums, fibrinous masses some lymphocytes and erythrocytes leakages in crypts.

No remarkable changes else.

256.

Remarkable edema, atrophia and some localised necrosis in mucous tissues with some leucocytes-infiltrations.

Remarkable reductions of lymph-follicles and generative centres with some swollen reticulum-fibres and slight hemorrhages.

[REDACTED]

[REDACTED]

Namely follicles in hyalinous or reticular form Ohno's.

In the neighbouring tissues, considerable congestion, edematous swelling of capillary walls and slight diffuse hemorrhages.

In crypts, some leucocytes, fibrinous masses, hyalinous drops, bacterial colonies and desquamated epitheliums.

Considerable congestion and edematous swelling of submucous tissues.

[REDACTED]

[REDACTED]

(B) SUMMARY

[REDACTED]

Conclusions based on 6 cases, which have some inflammatory changes macroscopically (and except other cases with no remarkable macroscopic changes).

These all 6 cases fall into somewhat bacterial affections, caused by secondary hematogenous metastasis (judging from infection-mode: namely subcutaneous infection).

All investigated cases 6 cases.

- .). with remarkable edema and localised ulcers in mucous membrane and some slight inflammation in lymph-follicles and in submucous tissues. 3 cases.
- .). with considerable edema in mucous membrane and slight hyperplasia of lymph-follicles with some increased germinative centres, accompanied with slight perifollicular congestion. 1 cases.
- .). with slight hyperplasia of lymph-follicles and slight hyperplasia of germinative centres. 1 cases.
- .). with no remarkable changes. 1 case.

Other cases have no remarkable changes macroscopically.

Accordingly.

- 3 cases in somewhat inflammatory changes.
- 2 cases in some reactive hyperplasia of lymph-follicles.
- other cases no remarkable changes.

[REDACTED]

On pernasal infection

) [REDACTED]

I can't investigate tonsils of pernasal infection-cases microscopically, which have some slight congestion of mucous membrane of pharynx and tonsils, macroscopically.

)

As if these affection are caused by glanders, can not be determined definitely, since I have not any micro-slices to investigate.

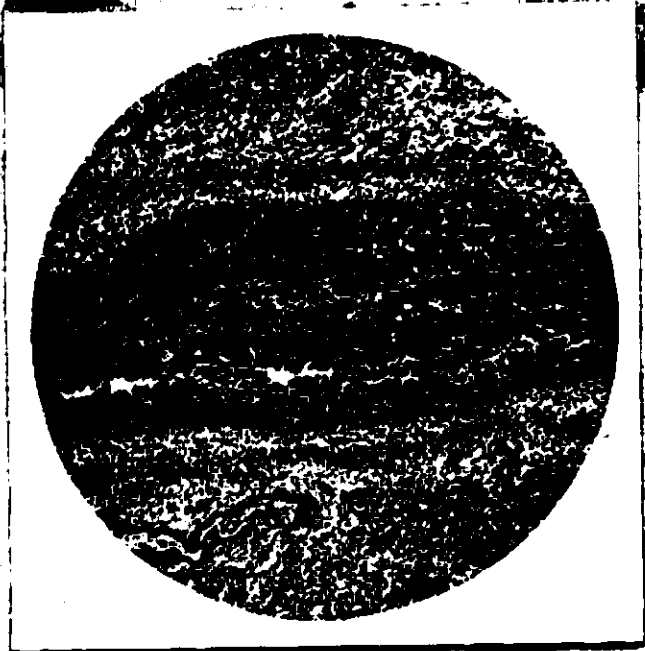
TONSIL

		16	50	152	180	185	254	
Epithelium	Atrophia		-	+	+	-	-	
	Cell edema		+	+	+	+	+	
	Desquamation		+	+	+	+	+	
	Necrosis		+	+	+	+	+	
	Infiltration	Leucocytes	+	+	+	+	+	
		Lymphocytes	+	+	+	+	+	
	Size		+	+	+	+	+	
	Blood Vessels	Contents	Erythrocytes	+	+	-	-	+
			Leucocytes	+	+	-	-	+
			Lymphocytes	+	+	+	+	+
Endothelium		Swelling	+	+	+	+	+	
		Desquamation	+	+	+	+	+	
		Hyperplasia	+	+	-	-	+	
Dilatation		+	+	+	+	+		
Lymph nodes	Lymphocytes		+	+	+	+	+	
	Endothelium	Swelling	+	+	+	+	+	
		Desquamation	+	+	+	+	+	
		Hyperplasia	+	+	-	-	+	
	Edema		+	+	+	+	+	
	Leucocytes		+	+	+	+	+	
	Eosinophile Leucocytes		-	-	-	-	-	
	Plasma Cells		+	+	-	-	-	
	Hyalin		+	+	+	+	+	
	Fibrin		+	+	+	+	+	
Fleming's Center	Size		+	+	+	+		
	Leucocytes		+	+	+	+		
	Contents	Erythrocytes	+	+	-	-	+	
		Leucocytes	+	+	-	-	+	
	Capillaries	Lymphocytes	+	+	-	-	+	
T. muc. submucosa	Congestion		+	+	+	+		
	Edema		+	+	+	+		
	Hemorrhage		+	+	+	+		
	Fibrin		+	+	+	+		
	Cellular Infiltration		+	+	+	+		
T. mus. externis	Hemorrhage		+	+	-	-		
	Necrosis		+	+	-	-		
	Cellular Infiltration		+	+	+	+		

[REDACTED]

Desquamated masses in lacuna and
necrotic changes of epitheliums.

[REDACTED]



P. 193

Desquamated masses in lacuna and
necrotic changes of epitheliums.

[REDACTED]



P. 236

[REDACTED]

Desquamated masses in lacuna.
Exudative-leucocytic.

[REDACTED]



R. 253

Diffuse hemorrhages in sub-epithelial tissues.



R. 254

[REDACTED]

[REDACTED]

55

[REDACTED]

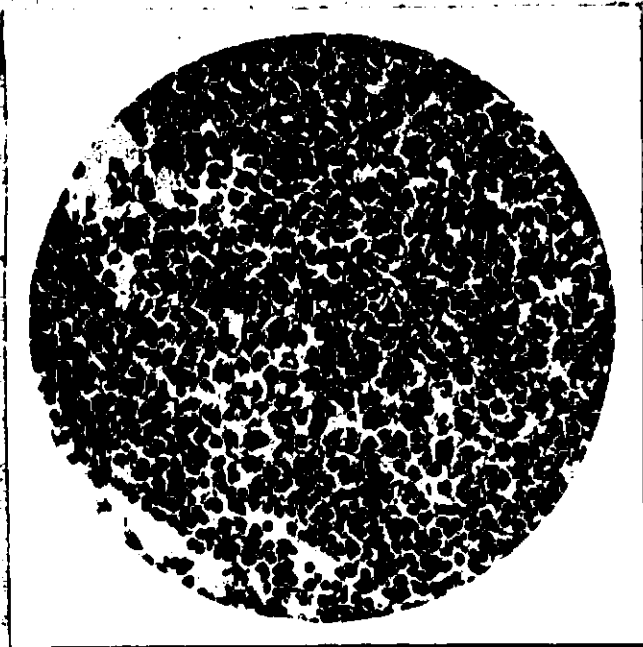
Reactive hyperplasia of germinative
centre.

[REDACTED]



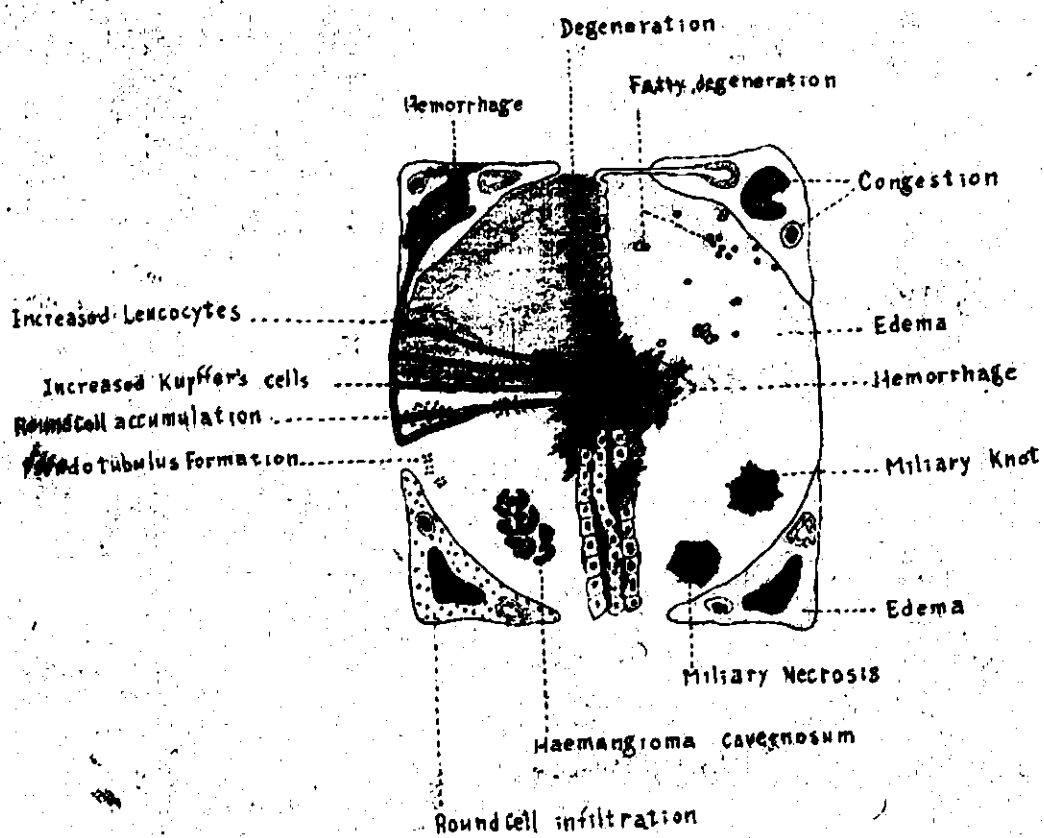
P 152

Reactive hyperplasia of germinative
centre, in high power.



K 152

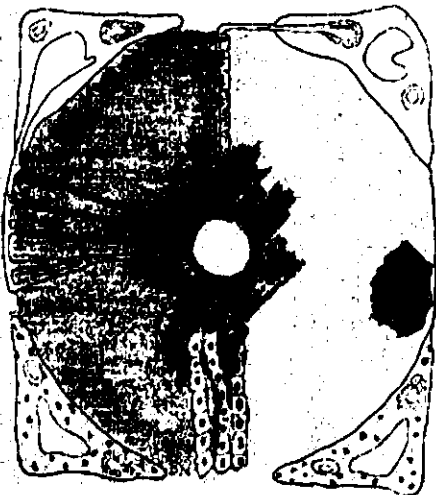
Liver



L I V E R.

(A) Microscop. Investigation.

16.

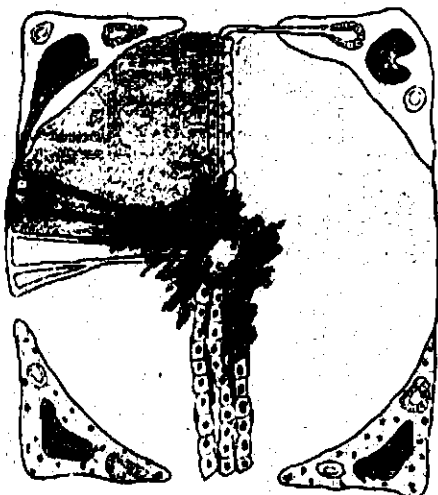


16.

Hepatitis serosa II. Stasis and exudative changes in Disse's spaces, esp. remarkable hemorrhages in central zone of acinus. More or less considerable parenchymatous degeneration with brown pigments, esp. in central zone of acinus.

Multiple miliary glander-knots with focal necrosis (decayed masses of parenchymal cells) and perifocal lymphocytic cells and more or less considerable histiocytic cells. Bounded more or less sharply.

50.

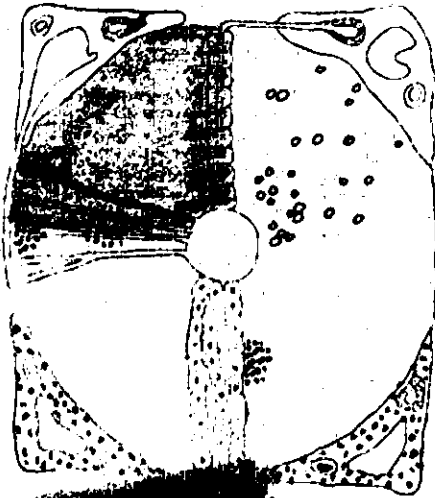


50.

Hepatitis serosa. I. Slight parenchymatous degeneration with considerable congestion in acinus and V.hepatica. Some lymphocytes and slightly increased histiocytic cells as capillary contents.

85. Hepatitis serosa . I-II . Cloudy or fatty degeneration with considerable conges-

85.



tion. Multiple submiliary lymphocytes accumulations in acinus with slight hemorrhagic perifocal reactions.

146.

Hepatitis serosa . II. Slight parenchymatous degeneration with slight congestion.

152.

Hepatitis serosa I-II. Severe congestion, severe exudative changes in Dissee's spaces with remarkable hemorrhages in central zone of acinus. Parenchymatous cells at these hemorrhagic central parts fall into necrotic masses (severe congestion, severe hemorrhage, fatty degeneration or furthermore decayed masses of parenchymatous cells etc).

152.



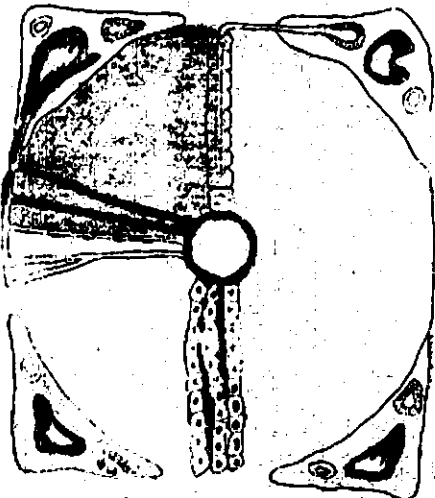
167.

Hepatitis serosa II. Parenchymatous degeneration with slight congestion in acinus . More or less remarkable increase of Kupfer's cells.

176.

Hepatitis serosa . I. Slight congestion, slight degeneration, more or less clarified parenchymal cells.

167.



178.



178.

Hepatitis serosa I-II. Extremely remarkable congestion with edematous swelling of capillary walls, exudative changes in Disse's space and more or less considerable hemorrhages in central zone of acinus.

Sometimes slight lymphocytes-accumulations at the walls of central veins (subendothelial lymphocytes-accumulations).

Atrophia and degeneration of parenchymal cells, esp. in central zone of acinus.

180.



180.

Hepatitis serosa II-III. Slight parenchymatous degeneration with slight congestion slight lymphocytes-infiltration at Glisson's capsule.

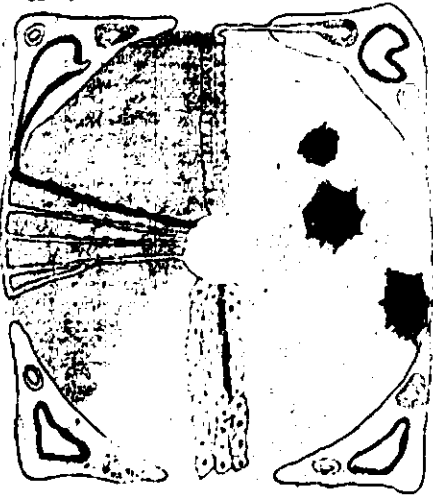
190.



190. Hepatitis serosa II.

Parenchymatous degeneration in medium degree with increased lymphocytes and leucocytes in capillaries of acinus and multiple submiliary lymphocytes-accumulation in acinus and Glisson's capsule. With Haemoangioma cavernosum hepatis.

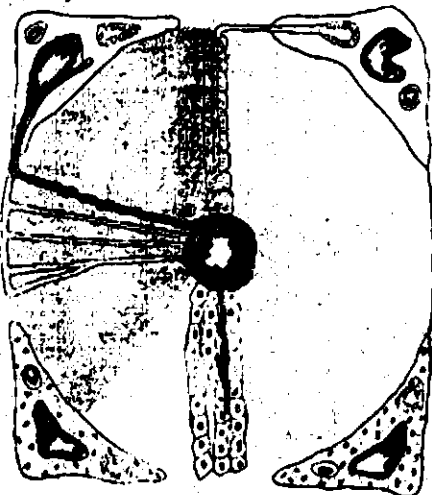
193.



193. Hepatitis serosa I.

Slight parenchymatous degeneration with remarkable hyperplasia of kupfer's cells and multiple submiliary glander-knots in remarkable proliferative form, which are formed mainly by histiocytic cells and a few residues of leucocytes and bounded sharply.

205.



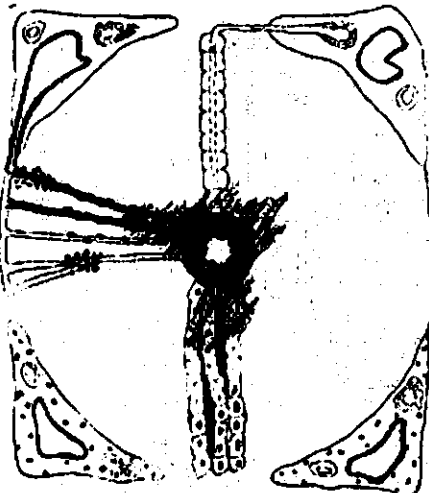
205. Hepatitis serosa I.

Slight parenchymatous degeneration. Congestion with increased lymphocytes as capillary contents and multiple lymphocytes-accumulations at some places in acinus.

207. Hepatitis serosa II.

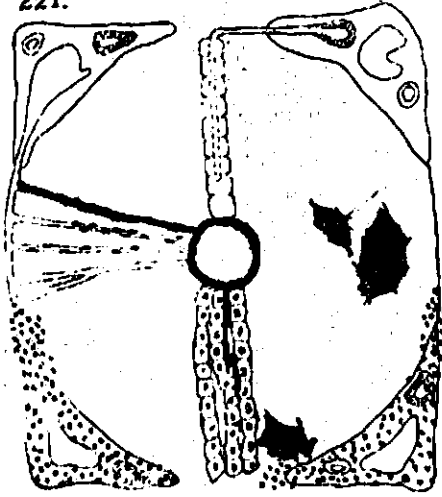
Parenchymatous degeneration in medium degree with remarkable congestion, exudative hemorrhagic changes in Disse's spaces and slight hemorrhage in central zone of acinus. Increased lymphocytes and leucocytes as capillary contents and multiple submiliary lymphocytes-accumulations as glander-knots. At other hands slight increased histiocytic cells as proliferative changes.

207.





221.



221. Hepatitis serosa I.

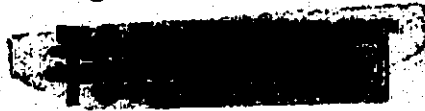
Severe parenchymatous degeneration with remarkable congestion and exudative-hemorrhagic changes in Disse's spaces which are accompanied with a large quantity of lymphocytes, a few leucocytes and slightly increased histiocytic cells as capillary contents and formation of multiple supermilliary or milliary knots in acinus which are foemed mainly by lymphocytes, necrotic residues of parenchym cells and slightly increased histiocytic cells.

At some perifocal parts of milliary knots, now formation of capillaries and pseudotubulus. in slight degree.

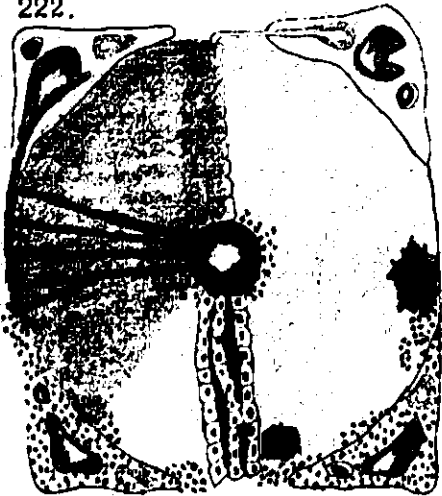
The same exsudative lymphocytic reactions are recognized at the walls of cntral veins (edematous swelling and lymphocytes-accumulation in subendothelial layers of central veins and hepatic veins) or at Glisson's (edematous swelling and lymphocytes-infiltration in Glisson's capsule).

222. Hepatitis serosa I-II.

Remarkable parenchymatous degeneration with severe congestion and remarkable exudative changes in Disse's spaces.



222.



A large quantity of lymphocytes and increased histiocytic cells as capillary contents.

Multiple submiliary knots in acinus which are formed mainly by lymphocytes and slightly increased histiocytic cells.

At some perifocal parts of miliary knots, new formation of pseudotubulus in slight degree.

The same exudative lymphocytic reaction are recognised at the walls of central veins or at Glisson's capsule.

224. Hepatitis serosa III-IV.

With postmortal changes. More or less (fatty) degeneration of parenchymal cells with central stasis.

229. Hepatitis serosa I.

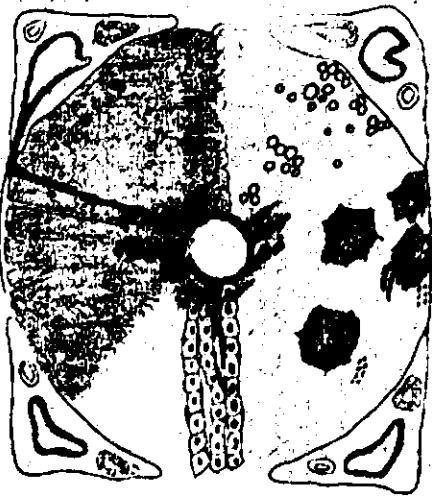
Slight parenchymatous degeneration with considerable congestion and slight exudative changes in Disse's spaces.

And remarkable leucocytes as capillary contents

254. Hepatitis serosa III.

Attention to multiple millet-corn large or supermiliary glander-knots in acinus ! Glander-knots with central caaseous focus are bouned with the proliferative walls of remarkable increased epitheloid cells

254.



(at some places giant cells), and a few lymphocytes and with new formation of capillaries or pseudotubulus at their perifocal parts. In other general liver-tissues: considerable increase of lymphocytes and Kupfer's cells and slight parenchymatous degenerations.

256. Hepatitis serosa II-III.

Considerable degenerative atrophica of parenchymal cells, esp. in central zone, caused by severe congestion, exudative changes in Disse's spaces and more or less remarkable hemorrhages. As capillary contents, it shows some lymphocytes and leucocytes. These exudative, leucocytic and lymphocytic cell reactions grew at some places (esp. at intercalary-portion of acinus and subendothelial layers of central veins) into submillary cell-accumulation (lymphocytes and leucocytes) with exudative changes.

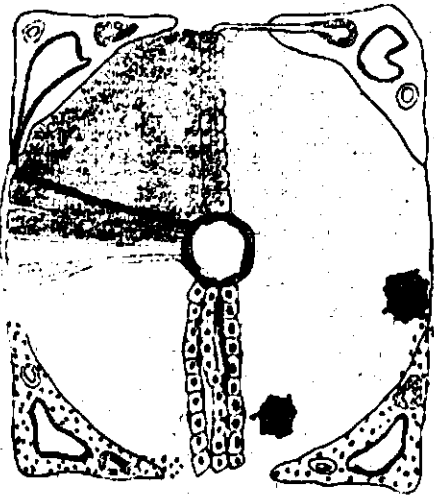
256.



727. Hepatitis serosa II.

Considerable parenchymatous degeneration, esp. in central zone of acinus which are caused by remarkable congestion and more or less increased lymphocytes and leucocytes as

727.



capillary contents) and edematous swelling of capillary-walls and serous exudation.

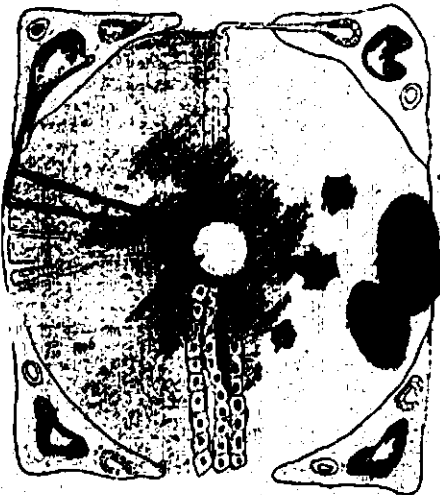
And multiple miliary ^K knots with many histiocytic cells in acinus.

731. Hepatitis serosa III-IV.

Multiple millet-corn large, supermiliary or miliary glanzer-knots in acinus.

The most parts of millet-corn large knots fall into caseous structurelose masses and bounded with thin walls slightly increased epitheloid cells and lymphocytes, with more or less exudative changes (edematous swelling, congestion and slight bleeding).

731.



Miliary knots are formed with more or less increased histiocytic cells, lymphocytes and a few residues of parenchymal cells.

In other general liver-tissues : remarkable hyperplasia of Kupfer's cells with slight congestion (and a few lymphocytes as capillary-contents).

[REDACTED]

(B) S U M M A R Y

The bird's-eye view of pathological changes of liver tissues in all cases as follows :

1) According to these results, I classified parenchymatous disturbances of liver-tissues as follows :

Hepatitis serosa I	6 cases.
" I-II	4 cases.
" II	6 cases.
" II-III	2 cases.
" III	1 case.
" III-IV	2 cases.
" IV	0 case.
With hemorrhages	15 cases.
with milisry glanders-knots	7 cases.

Generally mor or less considerable congestion:

in rather anemic stage	4 cases of them.
with congestion in slight degree	2 cases.
in medium degree	9 cases.
in severe degree	3 cases.
in remarkable degree	6 cases.

And more or less remarkable exudative changes in Disse's spaces,

in slight degree	2 cases.
in medium degree	4 cases.
in remarkable degree	13 cases.
in severe degree	2 cases.

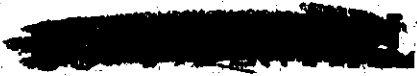
In preparation to these exudative-hemorrhagic processes, more or less considerable parenchymatous degeneration and disintegration of cell-arrangments.

Generally with cloudy swelling of cells in severe degree.



1 case with remarkable fatty degeneration, 0 case of them in severe degree.

Frequently emigration of some lymphocytes, or leucocytes in capillary nets in acinus and furthermore formation of military knots, caused by accumulation of these wandering cells, esp- in peripheral zone of acinus.



2)

.) No remarkable changes in 5 cases of them:

No.224.229.176.180.

With Hepatitis serosa II. 6 cases.

No.16.146. 167. 190.207.727.

With slightly increased histiocytic cells.

No,167. 205.

With Hepatitis serosa. III. 1 case.

No.254.

With Hepatitis serosa IV. 0 case.

With subendothelial round cell accumulation of central veins.

No.178. 222.

With hemorrhages and military-knots.

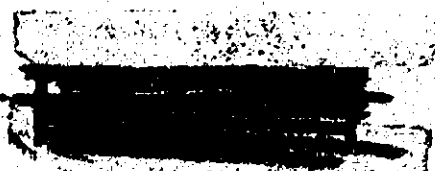
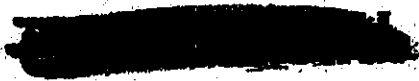
In initial stage No.85. 190.

In exudative stage No.256.222.731.

With military knots and (Hepatitis serosa II).

In rather productive stage No.193.221.

..) Increase of wandering cells in capillary-nets develop to pericapillar cell-accumulation and furthermore military knots, as pericapillar cell-accumulations:

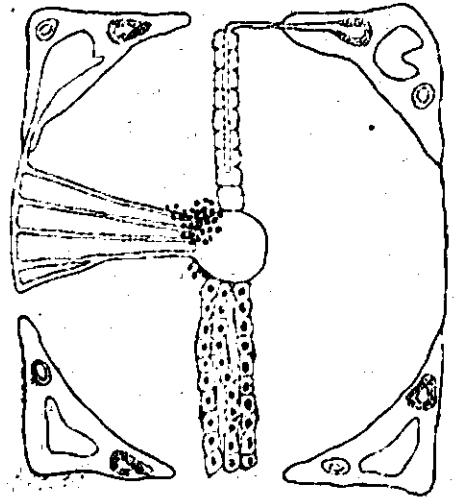
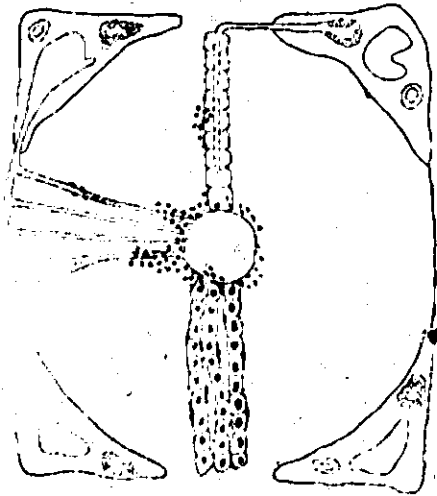


[REDACTED]

a) Subendothelial lymphocytes-accumulation at central veins-walls as its initial stage.

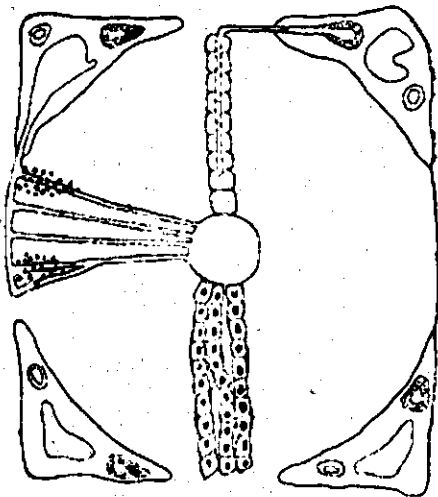
No. 170. 222 [REDACTED]

No. 222 178.



b) Multiple submiliary lymphocytes-accumulation, esp. in peripheral zone of acinus.

No. 190.



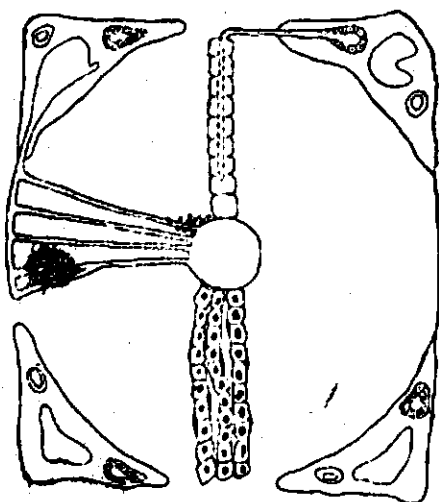


And then these changes grow with exudative reaction to necrosis:

- c) Multiple miliary knots(lymphocytes and leucocytes accumulation) with perifocal exudative changes(exudation and hemorrhages) etc.) at intercalary portions of acinus or subendothelial layers of central veins etc.

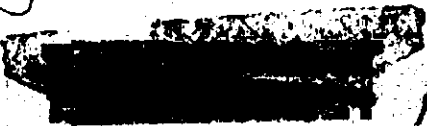
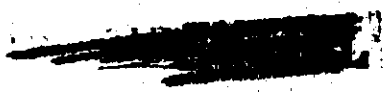
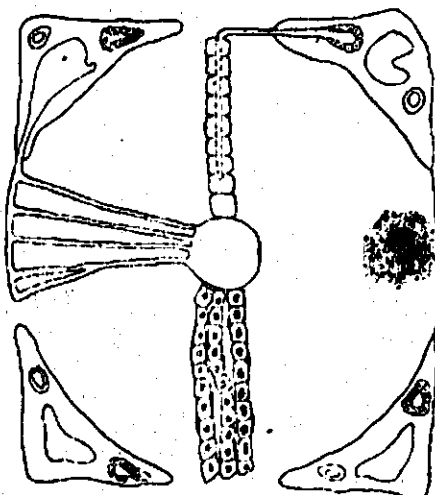


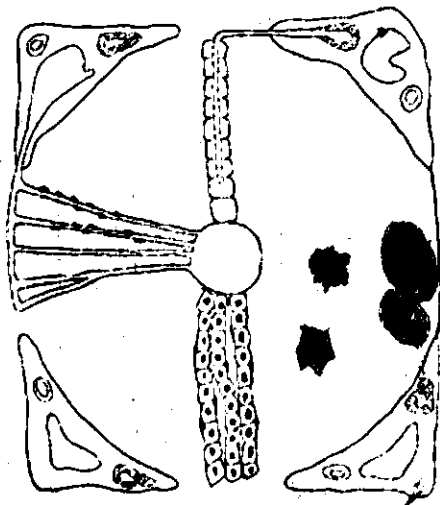
No.256.



- d) And multiple muluary knots with focal caseous necrosis(decayed masses of parenchym cell etc) and perifocal reactive(exudative-hemorrhagic-lymphocytic) reactions.

No.16.





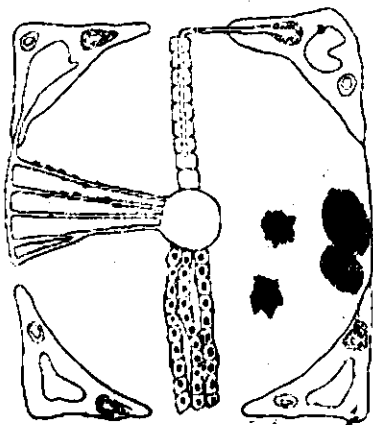
This case (No. 731.) died in course of more than 6 months with rather large (millet-corn sized) multiple necrosis in liver. These necrosis are bounded in the lapse of time, with slightly and gradually increased histiocytic cells and accompanied with slightly increased Kupffer's cells in other general tissues.

Contrary to this case, died No. 222. after shorter course (several months in extremely exudative stage (with slighter proliferative cell-reactions).

...) Miliary glander-knots are classified into 2 types, a) exudative and b) proliferative forms, I say.

All above mentioned cases are exudative or rather exudative. Contrary to these, some cases are rather proliferative with slightly increased histiocytic cells. For example: No. 193. with submiliary knots in remarkable proliferative form, which are formed mainly histiocytic cells and a few residues of leucocytes and bounded more or less sharply.

Glisson's capsule: generally with edematous swelling, 3 cases of them in severe degree and 9 cases of them in medium degree.



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Glisson's capsule: generally with edematous swelling, 3 cases of them in severe degree and 9 cases of them in medium degree.

[REDACTED]

Intense congestion and some hemorrhages in the central zone of acinus.

[REDACTED]



152

x70

[REDACTED]

Intense congestion and some hemorrhages in the central zone of acinus.

[REDACTED]



172 x70

[REDACTED]

[REDACTED]

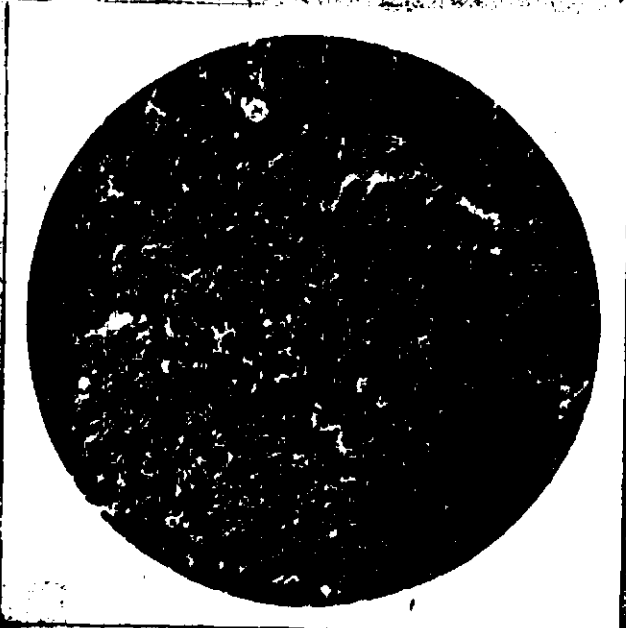
Remarkable round cell accumulation
in the peripheral zone of tumor
(mainly at the intercalary portion),
associated with some pericyclic
degeneration.

[REDACTED]



222 X60

Intense congestion and hemorrhages,
in high power.



[REDACTED]

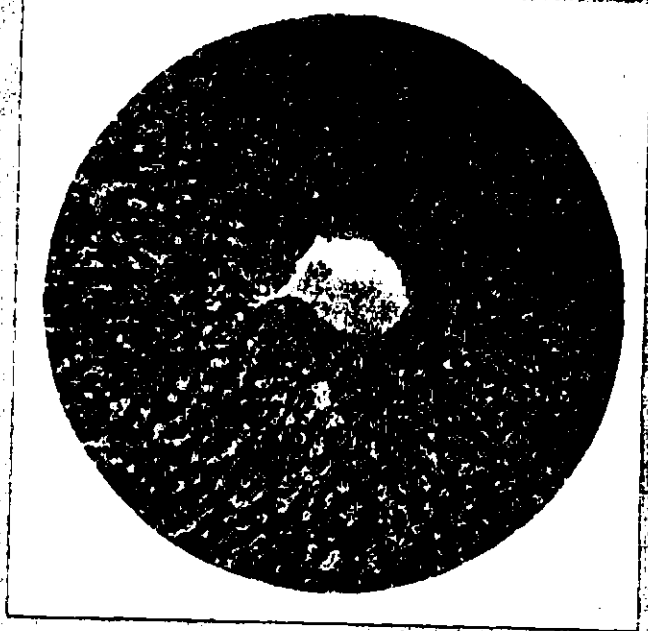
[REDACTED]

173 X130

[REDACTED]

Examination of [REDACTED] cell accumulation,
[REDACTED] showing [REDACTED] [REDACTED] [REDACTED]
in high power.

[REDACTED]



222

X80

Examination of [REDACTED] cell accumulation,
[REDACTED] showing [REDACTED] [REDACTED] [REDACTED]

[REDACTED]



174

224

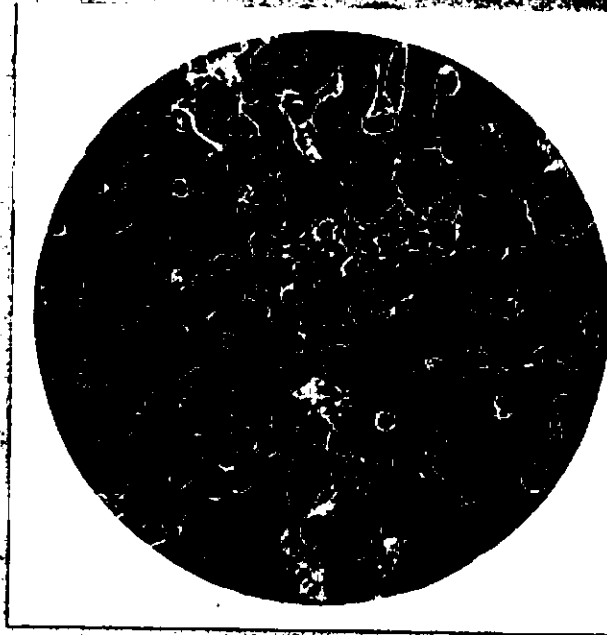
X140

[REDACTED]

[REDACTED]

Large round cell accumulation,
initial stage of glandular formation.

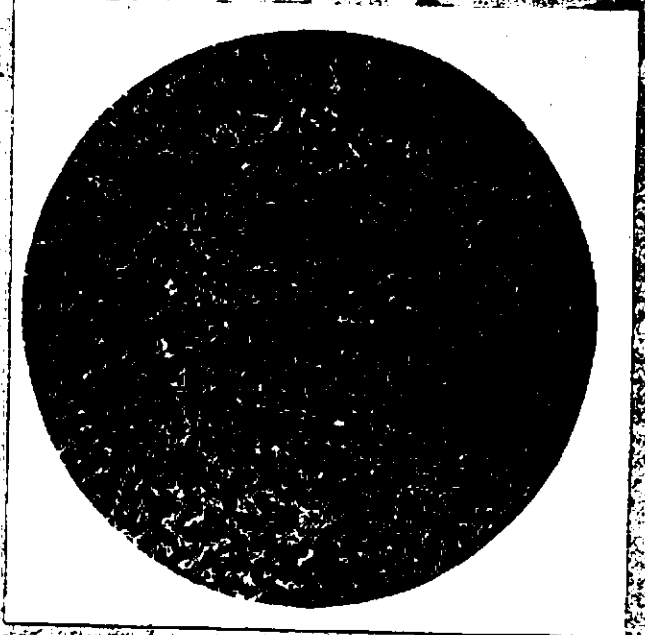
[REDACTED]



207

x260

Large, dark, circular field of view, in
initial stage of glandular formation.



[REDACTED]

[REDACTED]

113

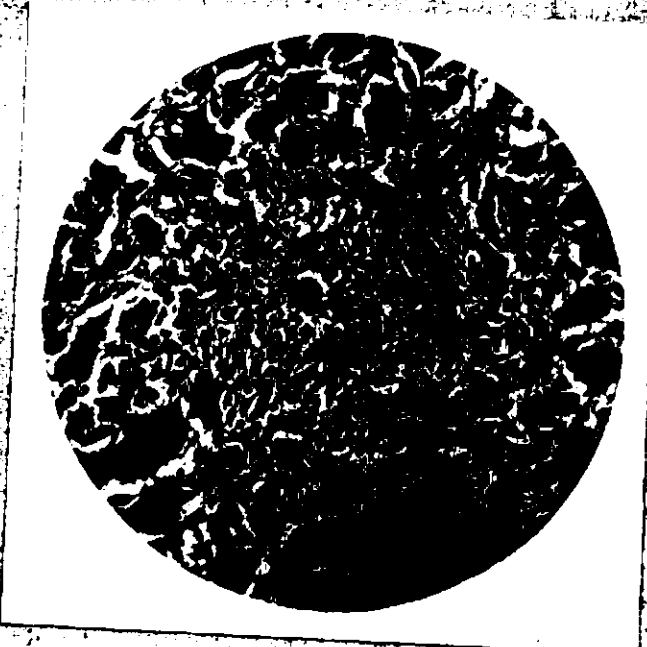
x200

175

[REDACTED]

ALLIARY GLANDS
SECRETORY EPITHELIUM
IN THE PEARL

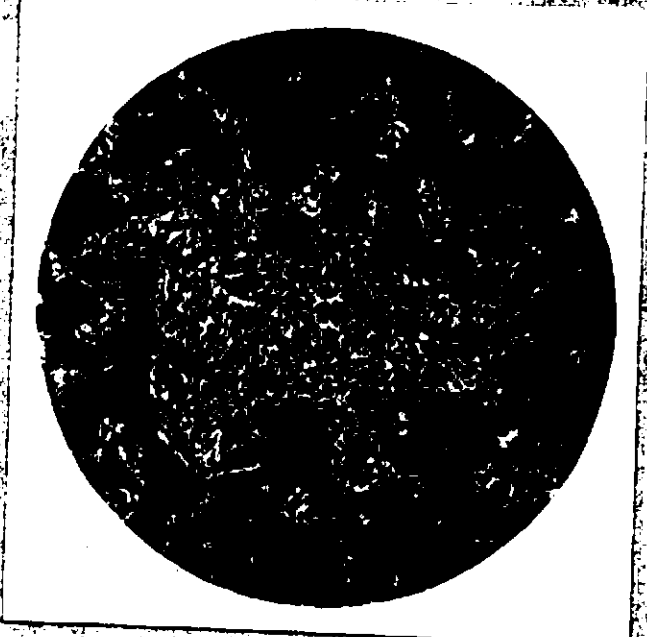
[REDACTED]



24 731

X240

ALLIARY GLANDS
SECRETORY EPITHELIUM
IN THE PEARL



221

X190

[REDACTED]

[REDACTED]

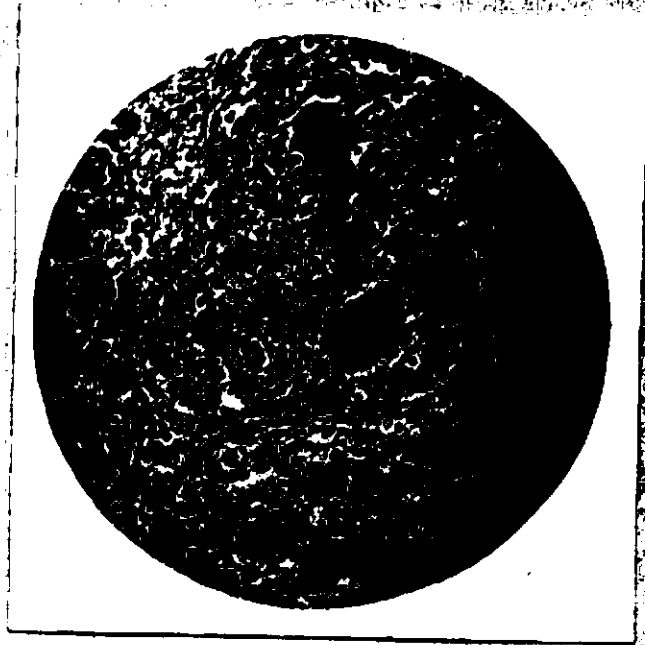
196

[REDACTED]

[REDACTED]

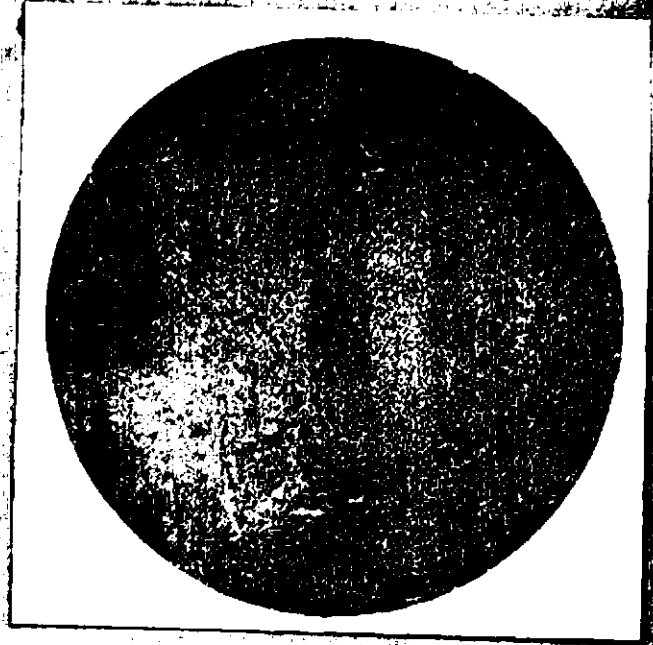
Glanders-knot in productive form,
with giant cell formation.

[REDACTED]



254 X210

Microscopically large glanders-knot,
in rather extensive form.



254 X20

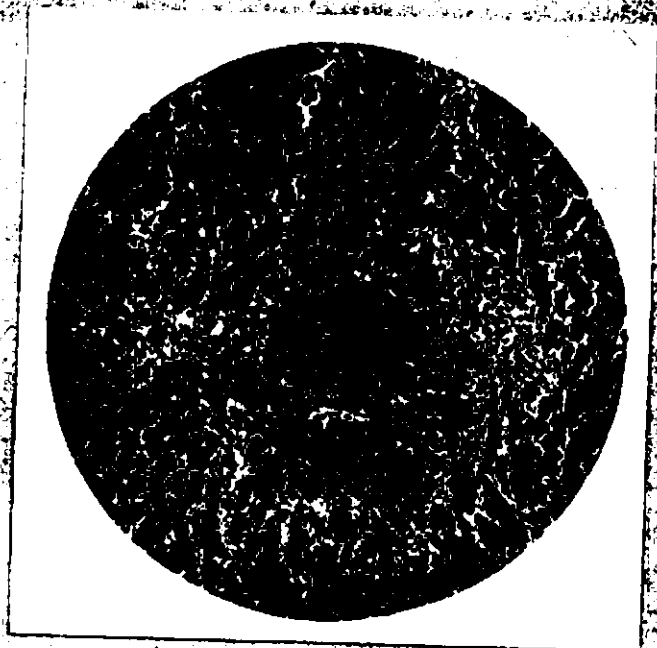
[REDACTED]

177

[REDACTED]

Miliary glanders - met. in
exudative form.

[REDACTED]



16

X100

Miliary glanders - met. in
rather exudative form.



1727

X240

[REDACTED]

[REDACTED]

178

[REDACTED]

Glandular-tissue with pseudo-tubular formation.

[REDACTED]

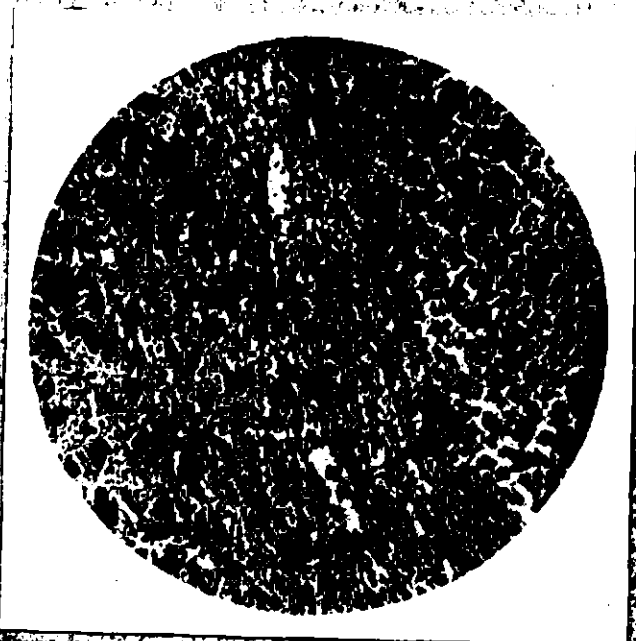


221

X150

Glandular-tissue in rather undistinct form.
At the margin-portion of nest.

[REDACTED]

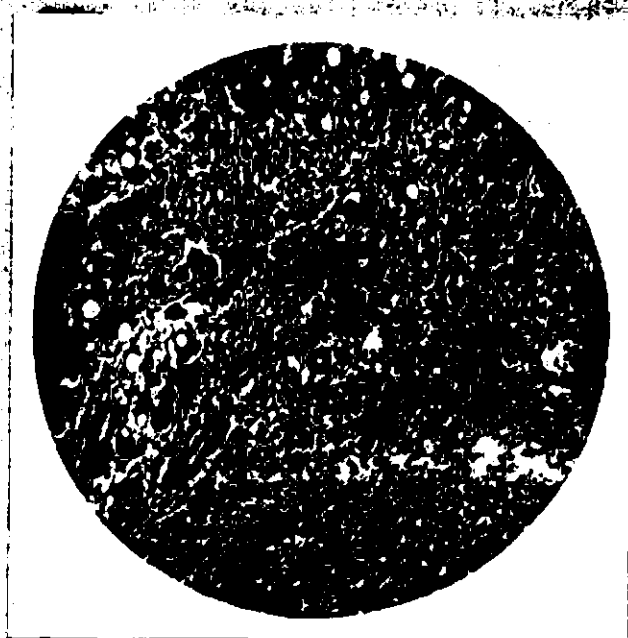


X150

[REDACTED]

179

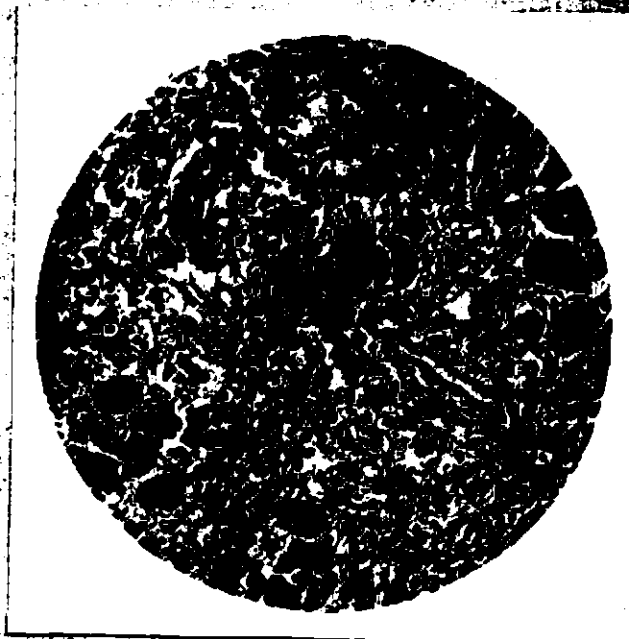
Subiliary glanders-knot with
some pseudo_tubulus formation.



254

X150

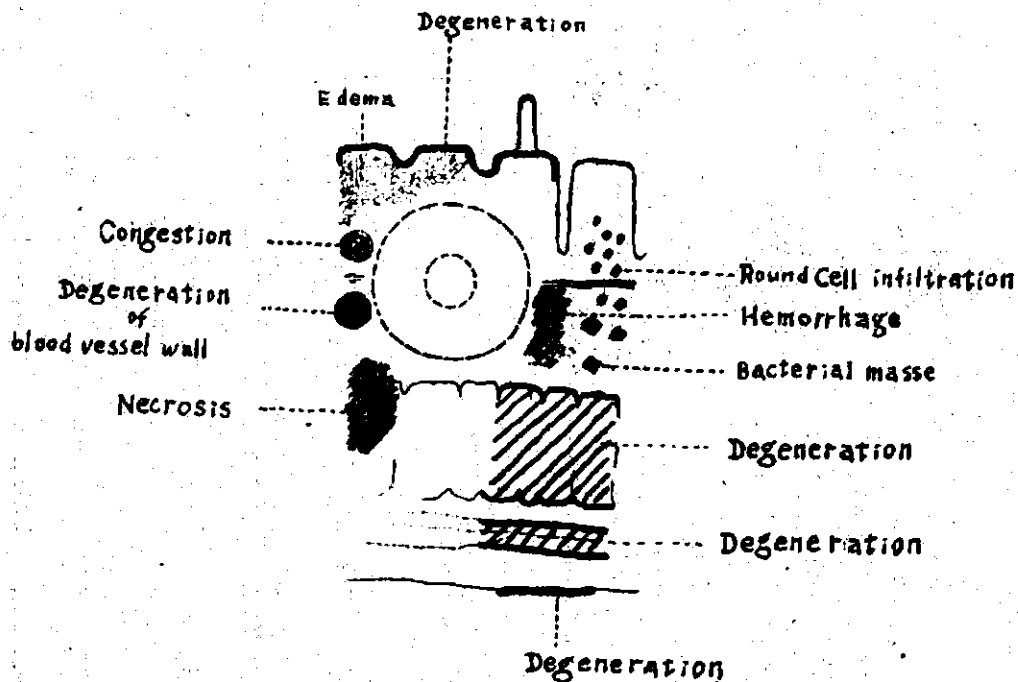
Glanders-knot with pseudo-tubulus
formation.
In high power.



257

X220

Stomach & Intestine



[REDACTED]

S T O M A C H

(A) Microscopical Investigation.

16. [REDACTED]

Almost normal, more or less atrophic glandular cells.

85.

Considerable congestion in T. submucosa and T. propria.

146.

Gastritis catarrhalis hypertrophicans. Considerable congestion in T. submucosa and T. propria.

152.

Almost normal, more or less atrophic glandular cells.

167.

Gastritis catarrhalis hypertrophicans. Considerable congestion in T. propria.

176.

Slight congestion, and slight leucocytes (some of them, eosinophilic leucocytes) - infiltration in mucous layers with slight congestion in T. submucosa.

Remarkable congestion in T. muscularis and subserous layers with more or less remarkable perivascular leucocytes and round-cell infiltrations.

180.

More or less atrophic glandular cells and slight congestion in T. propria.

180. [REDACTED]

More or less considerable catarrh and slight hyperplasia of lymphatic [REDACTED]

[REDACTED]

tic nodulus.

193.

Slight catarrh and no remarkable changes else. [REDACTED]

205.

Slight catarrh and slight congestion in mucous layers. No remarkable changes else.

221.

Slight catarrh, slight congestion in mucous layers and slight hyperplasia of lymphatic nodulus.

224.

Considerable congestion of mucous layers and submucous layers with slight edematous swelling.

229.

Considerable congestion in mucous layers, especially at their upper layers with slight hemorrhage.

254.

Gastritis catarrhalis hypertrophicans and no remarkable changes else.

256.

Slight hypersecretion with slight congestion in mucous layers and slight congestion in T. submucosa.

727.

More or less considerable hypersecretion and no remarkable changes else.

[REDACTED]

[REDACTED]

(B) S U M M A R Y .

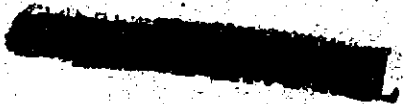
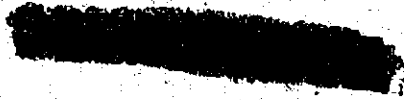
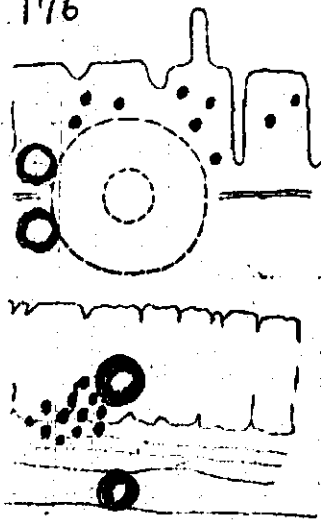
I can't point out any significant changes in all cases, except No. I76 case with considerable or remarkable congestion and some perivascular leucocytes-or lymphocytes-infiltrations.

Other cases without any significant changes; [REDACTED]

Atrophic glandular cells	5 cases.
Slight catarrh.	4 cases.
Chronic catarrh, due to the other factors.	cases.
Slight or considerable congestion in T. propria	4 cases.
and T. submucosa.	4 cases.



R. 176



STOMACH

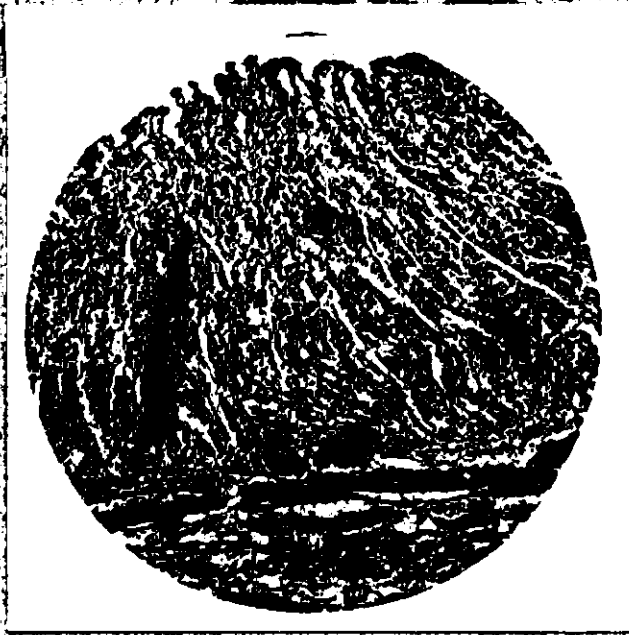
		16	85	146	152	167	176	180	190	193	205	221	224	229	254	256	277	
T. mucosa	Thickness	+	N	+	+	+	N	+	N	N	N	N	N	N	+	N	N	
	Mucus	-	-	+	-	+	-	-	+	+	+	-	-	-	+	-	+	
	Atrophia + Glands	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
	T. propria	Edema	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+
		Congestion	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-
		Hemorrhage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Leucocytes	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
		Plasma Cells	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-
Lymph-Nodules	Size	+	-	-	-	-	-	-	+	+	+	+	+	+	-	+	-	
	Indistinction of Limit	-	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	
	Edema	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Congestion	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Eosinophil Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Plasma Cells	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Appearance of Germinating Center:		-	-	-	-	-	-	-	+	-	-	+	+	-	-	-	-	
T. submucosa	Edema	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Congestion	-	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	
	Hemorrhage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Endothelium Hyperplasia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Blood Vessels Desquamation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Lymph-Vessels	Dilatation	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
		Lymphocytes	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
	Infiltration	Leucocytes	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
		Eosinophil Leucocytes	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
		Lymphocytes	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-
Plasma Cells		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Histiocytes		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T. muscularis	Atrophia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Edema	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Congestion	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	
Cellular Infiltration		-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	
T. subserosa	Edema	+	+	-	+	+	+	-	-	-	-	-	-	-	+	+	+	
	Cellular Infiltration	-	-	+	+	-	+	-	+	-	-	-	-	-	-	-	-	

N = Normal.

[REDACTED]

[REDACTED]

[REDACTED]



R. 224

x70

[REDACTED]



R 228

x130

[REDACTED]

[REDACTED]

187

[REDACTED]

SMALL INTESTINE

(A) Microscopical Investigation.

I6. [REDACTED]

Duodenal parts with more or less atrophic glandular cells.

50.

Enteritis catarrhalis with considerable hypersecretion and some desquamated epithelial cells. Slight congestion in mucous membrane.

85.

Almost normal and slight hypersecretion.

I46.

Slight edematous swelling and more or less atrophic glandular cells of mucous membrane. Slight hyperplasia of lymphatic nodulus and slight congestion in T. submucosa.

I52.

Enteritis catarrhalis levis with some desquamated epithelial cells. Slight congestion in mucous membranes.

I67.

Enteritis catarrhalis levis with considerable congestion and slight edematous swelling of mucous membrane. Congenital hyperplasia of lymphatic nodulus and considerable congestion in T. submucosa.

I76.

Almost normal. Slight cogention in mucous and submucous layers.

I80.

Post mortal changes with more or less atrophic glandular cells.

[REDACTED]

[REDACTED]

[REDACTED]

190.

Enteritis catarrhalis levis with some desquamated epithelial cells.

[REDACTED]

205.

Enteritis catarrhalis levis with slight congestion in mucous and submucous layers.

207.

Slight edematous swelling of mucous membrane with more or less atrophic glandular cells and slight congestion in submucous layers.

221.

Enteritis catarrhalis levis with some separated masses of desquamated epithelial cells and catarrhalic masses. Reactive hyperplasia of germinative centers of lymphatic nodulus.

More or less slight congestion in submucous layers.

224.

Remarkable congestion in mucous and submucous layers with slight edematous swelling of mucous membrane.

229.

Attention to remarkable changes in submucous layers! Some ruined blood vessels with numerous decayed masses of leucocytes and their nuclear fragments as capillary contents and ruins of capillary-walls. Remarkable congestion and edematous swelling with more or less remarkable perivascular diffuse round-cell-infiltrations. These inflammatory processes propagate themselves to mucous membrane,

[REDACTED]

[REDACTED]

[REDACTED]

which fall into edematous swelling with considerable congestion and at some places structureless decayed masses.

254. [REDACTED]

More or less atrophic glandular cells and slight congestion in submucous layers. Some submilliary glanders-knot with epitheloid cells in T. serosa.

727.

Slight edematous swelling of mucous membranes with reactive hyperplasia of lymphatic nodulus. In germinative centers of lymphatic nodulus exist some increased epitheloid cells with some giant-cells (perhaps due to glander-infection). Without ulcer-formation.

[REDACTED]

(B) S U M M A R Y.

Investion of 16 micro-slices.

[REDACTED]

We could assume, based on 4 cases (No. 224, 229, 254 and 727 case), general sketches of hematogenous infection of glanders in small intestine: namely,

a) in acute stage,

At first, reactive remarkable congestion with some edematous swelling in submucous and mucous tissues (No. 224 or No. 224 with typical military glanders-knots-formation with some perifocal changes in subserous tissues).

b) Then diffuse inflammatory propagation came into questions: namely in (No. 229): in focus (in submucous tissues), remarkable congestion and necrotic ruins of capillary-walls with more or less remarkable diffuse inflammatory propagation in the neighbouring mucous tissues with some ruining processes.

c) in chronic stage:

We can't find chronic cases with diffuse inflammatory reactions or remarkable abscess-formation.

In 727 case, acute severe inflammatory signs disappeared already and occurred only slight chronic changes in germinative centres of lymphatic nodulus with slight hyperplasia of some reticulum cells and some giant cells formation.

[REDACTED]

[REDACTED]

191

[REDACTED]

As not so significant complication-signs:

with Enteritis catarrhalis in slight degree. 6 cases.

[REDACTED] with slight congestion in mucous tissues. 8 cases.

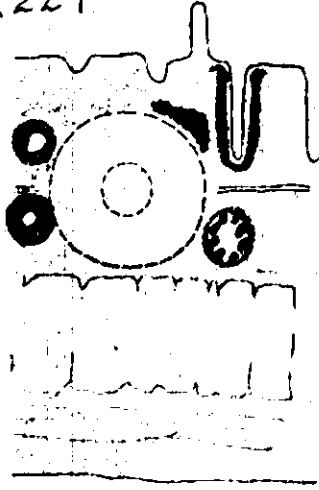
and submucous tissues. 7 cases.

with slight atrophic glandular cells. 3 cases.

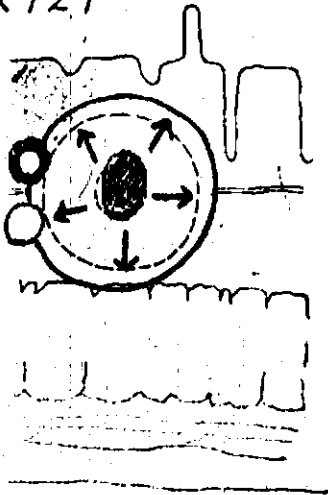
with no considerable changes else. 1 cases.



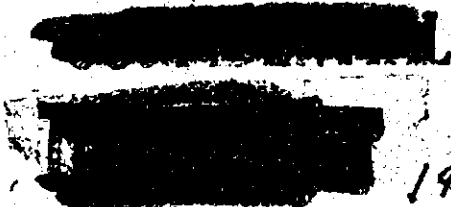
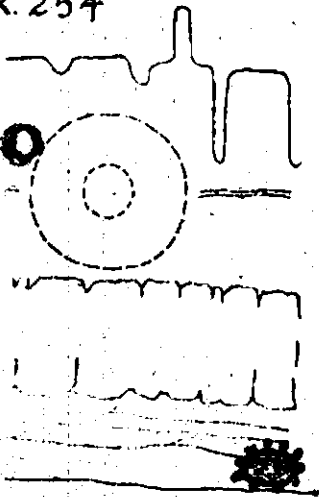
R229



R727



R.254



SMALL INTESTINE

		16	50	85	146	152	167	176	180	190	193	205	207	221	224	229	254	277	
T. mucosa	Thickness	++	-	-	+	-	-	-	-	-	+	-	+	-	-	-	+	-	
	Mucus	-	+	+	-	+	+	-	-	+	-	+	-	+	-	-	-	-	
	Atrophia of Glands	+	-	-	+	-	-	-	+	-	+	-	+	-	-	-	+	-	
	T. propria	Edema	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		Congestion	-	+	+	-	-	+	+	-	-	+	+	+	+	+	+	+	+
		Hemorrhage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Plasma Cells	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lymph. Nodules	Size	+	-	-	+	-	+	-	-	-	-	-	+	+	-	-	-	+	
	Indistinction of Limit	+	+	+	+	+	+	+	-	-	-	+	+	+	-	+	+	+	
	Edema	+	+	+	+	+	+	+	-	-	-	+	+	+	-	+	+	+	
	Congestion	-	-	-	-	-	+	+	-	-	-	+	+	+	-	+	+	+	
	Leucocytes	+	-	-	-	-	-	-	-	-	-	+	+	+	-	+	+	+	
	Eosinophil Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Plasma Cells	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T. submucosa	Appearance of Germinating Center	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
	Edema	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Congestion	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Hemorrhage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Endothelium	Hyperplasia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Blood vessels	Desquamation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Lymph. Vessels	Dilatation	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	
		Lymphocytes	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
		Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Eosinophil Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lymphocytes		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-		
T. muscularis	Plasma Cells	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-		
	Histiocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-		
	Atrophia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Edema	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
T. subserosa	Congestion	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Cellular Infiltration	+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+		
T. subserosa	Edema	-	-	+	-	-	-	-	+	+	+	+	+	+	+	+	+		
	Cellular Infiltration	+	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+		

[REDACTED]

Intense congestion and some
edematous swelling of mucous
membrane.

[REDACTED]



AA. R.152 100

[REDACTED]

[REDACTED]

195

[REDACTED]

Ruined blood-vessel and some leucocytes
dissemination, in high power.

[REDACTED]



88 R 229 x 170

Typical glanders-knot in T.subserosa.



88 R 254 x 40

~~CONFIDENTIAL~~

In subcutaneous tissues.
Ruined blood vessel and intense peri-vascular leucocyte dissemination.

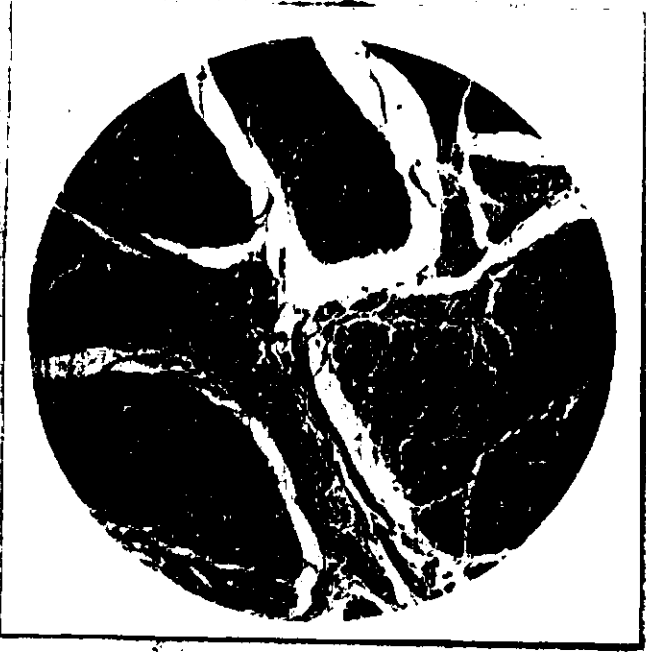


~~CONFIDENTIAL~~

229

X40

Round cell accumulation at perivascular portion.



R-176

80

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~ 197

[REDACTED]

Reactive hyperplasia of germinative centre,
with giant cell formation.



[REDACTED]

DL R 727 x60

Reactive hyperplasia of germinative centre,
with giant cell formation, in high power.



DL R. 727 x370

[REDACTED]

[REDACTED] 198

[REDACTED]

LARGE INTESTINE

(A) Microscopical Investigation.

50.

[REDACTED]

Almost normal. Slight desquamated cells.

85.

Slight catarrh and slight congestion in mucous and submucous layers.
No remarkable changes else.

I46.

Edematous swelling of mucous layers with more or less atrophic glandular cells and considerable congestion in submucous layers.

I67.

Almost normal and slight edematous swelling of mucous layers.

I52.

Almost normal and slight hyperplasia of lymphatic nodulus.

I76.

Colitis catarrhalis chronica with a large ^{qu} quantity of separated masses (desquamated epithelial cells and catarrhalic masses) and slight eosinophilic leucocytes infiltrations in mucous layers. Slight congestion in mucous and submucous layers and remarkable hyperplasia of lymphatic nodulus with more or less considerable reactive hyperplasia of germinative centers.

I78.

Remarkable atrophica of mucous layers and considerable congestion in submucous layers.

I90.

[REDACTED]

Almost normal and no remarkable changes else.

[REDACTED]

[REDACTED]

205.

Slight catarrh and no remarkable changes else.

207.

Slight atrophic mucous layers and no considerable changes else.

222.

More or less atrophic mucous layers and remarkable congestion of mucous and submucous layers with slight edematous swelling.

224.

Remarkable atrophic mucous layers with slight edematous swelling.

224.

Remarkable atrophic mucous layers with slight congestion in T. submucosa.

229.

Slight catarrh with considerable congestion in T. submucosa.

No remarkable changes else.

254.

Colitis catarrhalis levis and no remarkable changes else.

731.

Colitis catarrhalis with slight edematous swelling of mucous layers and slight degeneration of Auerbach's plexus.

[REDACTED]

(B) S U M M A R Y.

I can't point out any significant changes: almost all cases have rather atrophic glandular cells and no remarkable changes else. Sometimes with slight or considerable congestion and sometimes with slight or considerable and chronic (due to the other factors) catarrh.

[REDACTED]

[REDACTED]

201

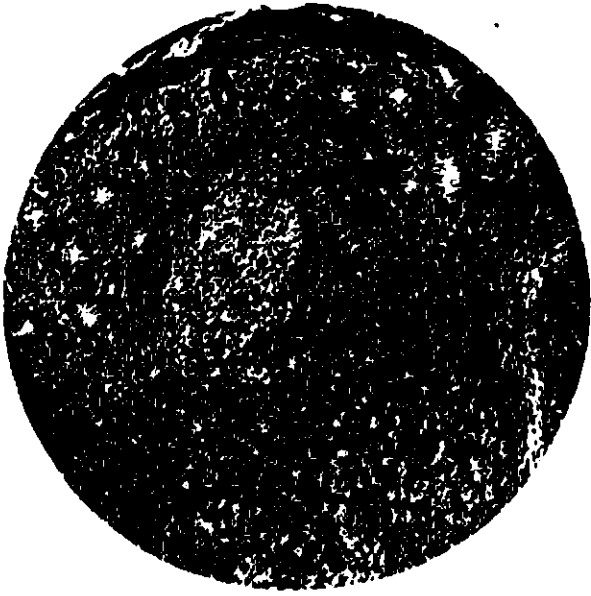
LARGE INTESTINE

		50	85	146	152	167	176	178	190	193	205	207	222	224	228	254	731	
T. mucosa	Thickness	-	-	+	-	-	-	##	-	-	-	+	+	+	-	-	-	
	Mucus	-	+	-	-	-	+	-	+	-	+	-	-	-	-	-	+	
	Atrophy of Glands	-	-	+	-	-	-	+	-	-	-	+	-	+	-	-	-	
	Ipropria	Edema	+	-	+	+	+	+	-	+	+	+	+	+	+	+	+	+
		Congestion	-	+	-	-	-	+	-	+	-	+	+	+	+	+	+	+
		Hemorrhage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Plasma Cells	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-
Lymph-Nodules	Size	-	-	-	+	-	##	-	-	-	-	+	-	-	-	-	-	
	Indistinction of Limit	+	+	+	+	-	-	+	+	+	+	+	-	-	-	+	+	
	Edema	+	+	-	+	-	-	-	+	+	+	+	-	-	-	-	+	
	Congestion	+	+	-	-	-	+	+	+	+	+	+	-	-	-	-	-	
	Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Eosinophil Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Plasma Cells	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T. submucosa	Appearance of Germinating Center	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	
	Edema	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Congestion	-	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+	
	Hemorrhage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Endothelium																	
	Blood Vessels																	
	Lymph. Vessels																	
	Dilatation	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	
	Lymphocytes	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	
	Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Eosinophil Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Lymphocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Plasma Cells	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Histiocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
T. muscularis	Atrophy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Edema	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Congestion	-	+	+	-	-	+	-	+	+	+	+	+	+	+	+	+	
	Cellular Infiltration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T. subserosa	Edema	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Cellular Infiltration	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	

[REDACTED]

Reactive hyperplasia of germinative center.

[REDACTED]



221
176

x60

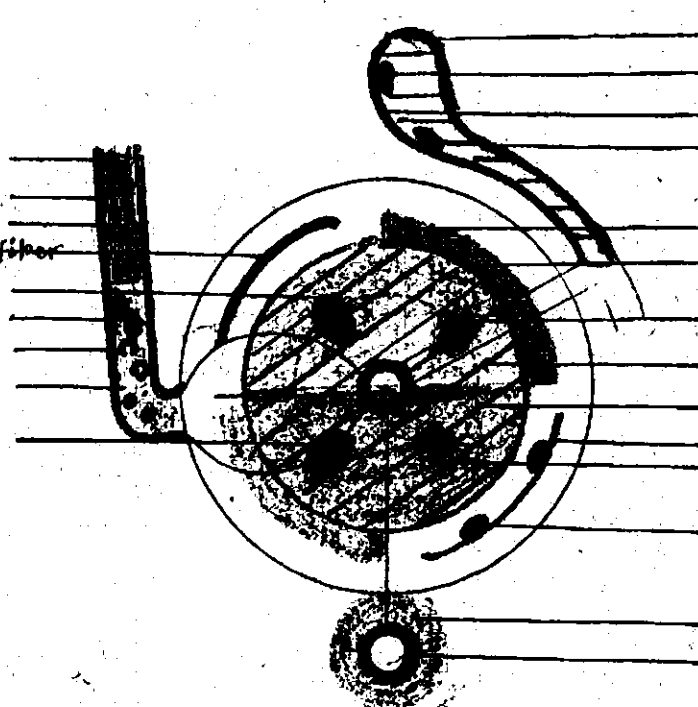
[REDACTED]

[REDACTED]

203

Spleen

Histocyte
 B. cord's Hyperemia
 Reticulum cell
 Hyalinous swelling of Ret-fiber
 Bacterial masses
 plasma cell
 Leukocyte
 B. cords Exudation
 Hyalinous masses



Swelling of Sinus wall
 Congestion
 Hyaline Swelling
 Hyperplasia of sinus endothel.
 Perifollicular Hemorrhage
 Reduction of Follicle
 Bionecrosis
 Diminution of Lymphocyte
 Hemorrhage
 Swelling of Reticulum fiber
 Necrosis
 Hyperplasia of Ret-cell
 Portal edema
 Hyaline Degeneration

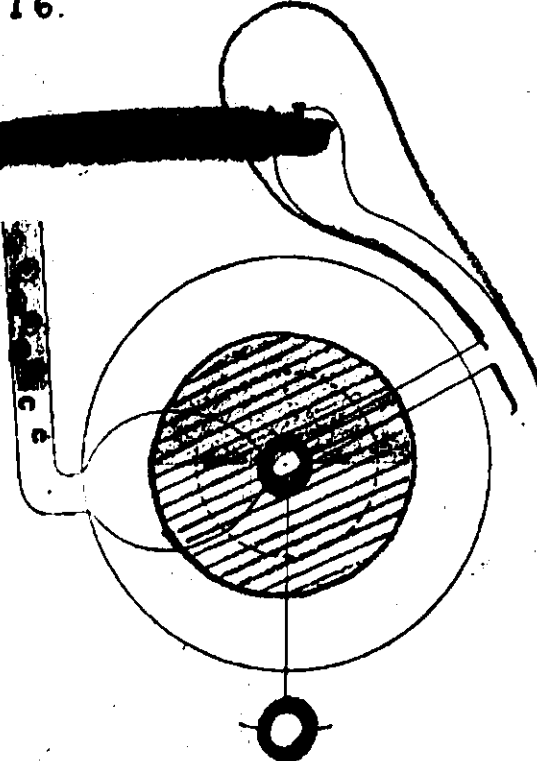
[REDACTED]

S P L E E N

(A) MICROSCOPICAL INVESTIGATION

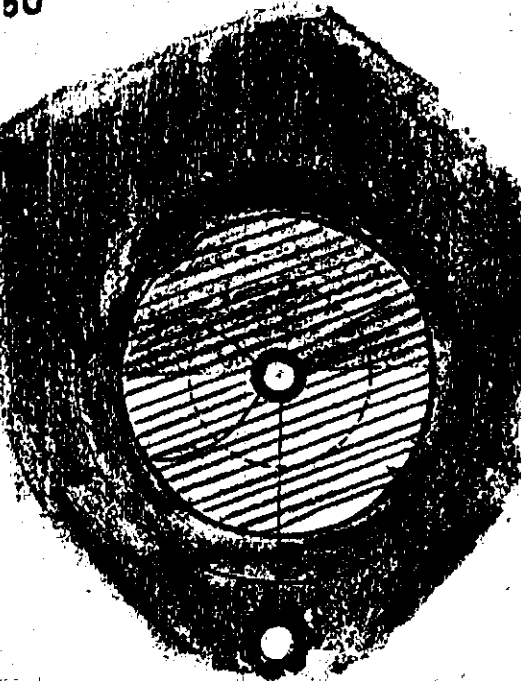
16.

16.



Follicles: Considerable diminution of follicles with hyalinous swelling of walls of central and penicilliary arteries and perivascular edema which caused edematous swelling, multiple hemorrhages in follicular tissues and considerable diminution of follicular lymphocytes. No significant hyperplasia of histiocytic cells. Pulpa-meshes: ~~Remarkable~~ congestion in sinuses and considerable exudative changes (serous exudation, slight bleeding or so-called blood-sea, edematous swelling of reticulum-fibres and diminution or diminish of lymphocytes.), with slight proliferative tendency (slight proliferation of reticulum cells and endothelial cells of sinus-walls.).

50.



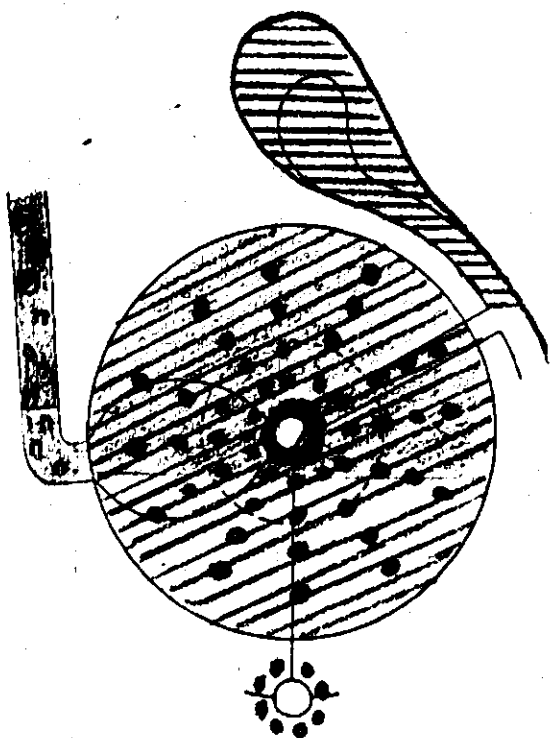
Follicles: Slight reduction of follicles with moderate hyalinous degeneration of central and penicilliary arteries and slight diminution of follicular lymphocytes. Considerable perifollicular congestion and bleeding.

Pulpa-meshes: Severe stasis of venous sinus and diffuse blood-sea with edematous swelling of reticulum-fibres and sinus-walls. Remarkable diminution or diminish of lymphocytes in pulpa-meshes.

[REDACTED]

[REDACTED]

85.



Beside these exudative changes, slight hyperplasia of reticulum cells or histiocytic cells.

85.

Follicles: Slight diminution of follicles with considerable hyalinous swelling of walls of central and penicilliary arteries and slight hyperplasia of histiocytic cells in follicular tissues.

Considerable perifollicular congestion and bleeding.

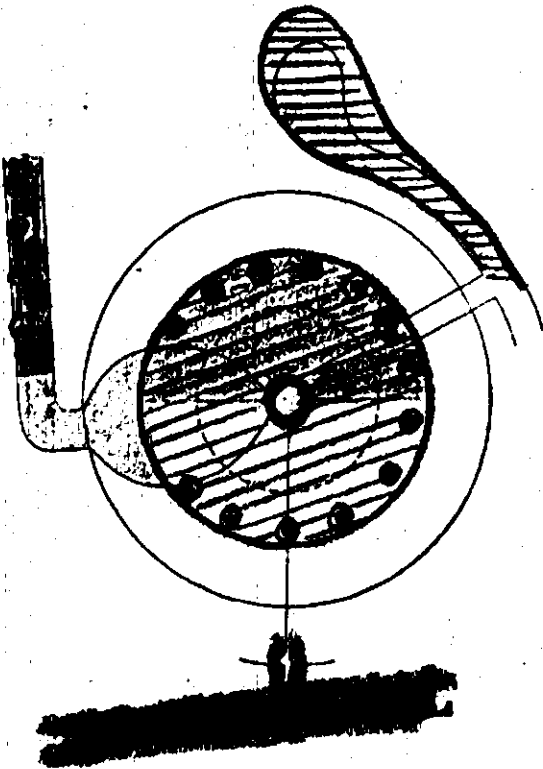
Pulpa-meshes: Severe stasis of venous sinuses and hemosiderosis. Considerable hyperplasia of reticulum cells or histiocytic cells, esp. at perifollicular and peri-penicilliar portions (our so-called slight "proliferative reactions at polar parts").

146.

Follicles: Considerable reduction of follicles with considerable hyalinous swelling of walls of central and penicilliary arteries and edematous swelling of follicular tissues. Considerable peri-follicular edema (our so-called polar edema) and slight hyperplasia of histiocytic cells in follicular tissues.

Pulpa-meshes: Considerable exudative processes (considerable congestion in sinuses, hemosiderosis, leakage of erythrocytes and edematous swelling of reticulum-fibres) and on the other hand slight hyperplasia of reticulum cells,

152.



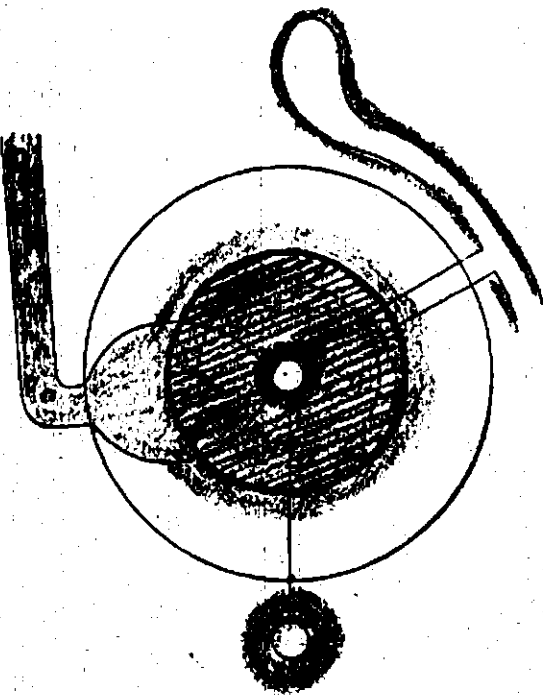
esp. at perifollicular portions.

152.

Follicles in considerable reduction with considerable hyalinous degeneration of central arteries and intra- and perifollicular edema. Slight hyperplasia of histiocytic cells in germinal centers.

Pulpa-meshes: Considerable congestion in venous sinuses, leakage of erythrocytes, and slight edematous swelling of reticulum-fibres. On the other hand, slight hyperplasia of histiocytic cells, esp. at perifollicular portions and slight hyperplasia of reticulum-fibres.

167



167.

Follicles: Considerable reduction of follicles with edematous swelling of walls of central arteries and considerable edematous swelling of intra- and perifollicular tissues.

Diminution or slight diminish of follicular lymphocytes.

Pulpa-meshes: Considerable congestion in sinuses, leakage of erythrocytes (so-called blood-sea) with plenty leucocytes-emigrations and edematous swelling of reticulum-fibres. With typical our so-called polar edema.

178.

Follicles: Considerable reduction of follicles



with edematous swelling of walls of central arteries and intra- and peri-follicular edema. Considerable diminution of follicular lymphocytes.

Pulpa-meshes: Slight congestion in sinuses and edematous swelling of reticulum-fibres. Slight hyperplasia of histiocytic cells.

18u.

Follicles: Considerable reduction of follicles with slight hyalinous swelling of central arteries and intra- and peri-follicular edema.

slight diminution of follicular lymphocytes and hyperplasia of histiocytic cells in follicular tissues.

Pulpa-meshes; Considerable congestion in sinuses and slight swelling of reticulum-fibres. Moderate hyperplasia of histiocytic cells and endothelial cells of sinus-walls.

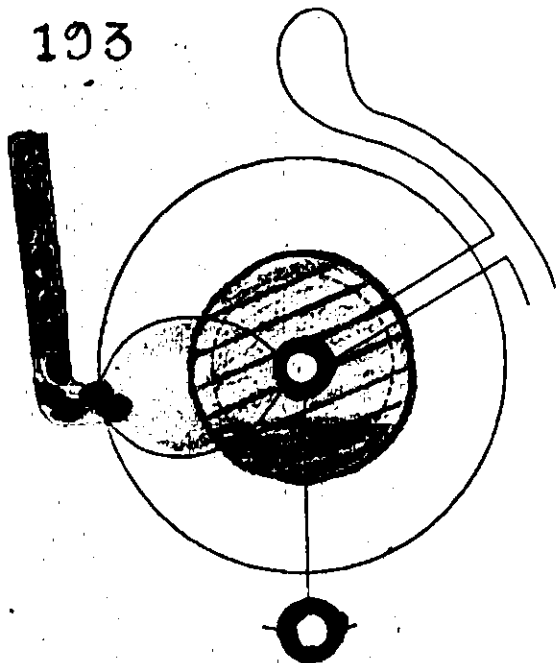
190:

Follicles: Considerable reduction of follicles with slight hyalinous swelling of walls of central arteries and slight intra- and peri-follicular edema. Slight hyperplasia of histiocytic cells in follicular tissues.

Pulpa-meshes: Considerable congestion slight leakage of erythrocytes (slight blood-sea) and edematous swelling of reticulum-fibres.

Slight hyperplasia of histiocytic cells, esp.

193



at perifollicular portions and slight hyperplasia of reticulum-fibres.

193.

Follicles: Considerable reduction of follicles with hyalinous swelling of walls of central arteries and considerable intra-and perifollicular edema, accompanied with considerable diminution of follicular lymphocytes.

Pulpa-meshes: Considerable congestion, leakage of erythrocytes and edematous swelling of reticulum-fibres. Considerable hyperplasia of histiocytic cells and plasma cells, esp. at perifollicular portions.

221.

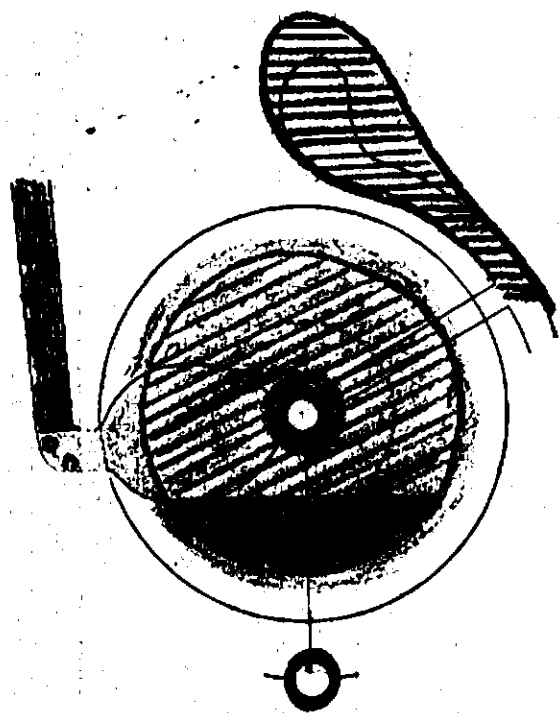
Follicles: Slight reduction of follicles with hyalinous swelling of central and penicillary arteries and considerable intra-and perifollicular edema, accompanied with remarkable diminution of follicular lymphocytes.

Pulpa-meshes: Considerable congestion, leakage of erythrocytes and slight swelling of reticulum-fibres. On the other hand, slight hyperplasia of histiocytic cells (with erythrophagy) and slight hyperplasia of reticulum-fibres.

222.

Follicles: Considerable reduction of follicles with slight hyalinous swelling of central arteries and intra-and peri-follicular edema. Considerable diminution of follicular lymphocytes.

221



~~CONFIDENTIAL~~

Pulpa-meshes: Considerable congestion in sinuses, remarkable leakage of erythrocytes (blood-sea) and edematous swelling of reticulum-fibres and sinus-walls.

224.

~~CONFIDENTIAL~~

Follicles: Considerable reduction of follicles with hyalinous degeneration of central and penicillar arteries and severe intra- and perifollicular edema, accompanied with slight hemorrhages and diminution of lymphocytes in follicular tissues.

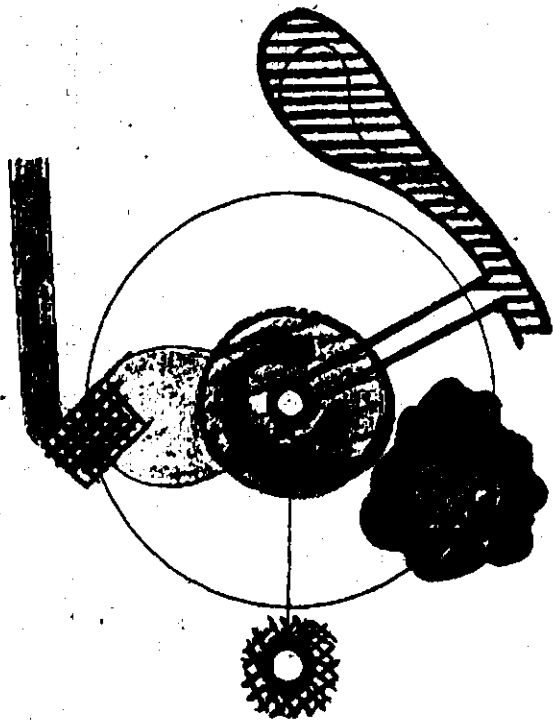
Perifollicular edema and perifollicular hemorrhages (exudative hemorrhagic changes at our so-called polar portions).

Pulpa-meshes: Considerable congestion, leakage of erythrocytes (blood-sea) and severe edematous swelling of reticulum-fibres.

229.

Follicles: Severe reduction of follicles with severe hyalinous degeneration of central arteries and severe exudative hemorrhagic changes in follicular tissues (severe edematous swelling of intra- and perifollicular tissues, considerable hemorrhages and at some places submiliary necrosis etc), accompanied with multiple submiliary necrosis at our so-called polar portions (perifollicular portions). These glanders-knots are completely caseous and structureless in focal parts, and surrounded with severe hemorrhagic-exud

229



ative perifocal changes, accompanied with slight proliferative reactions (slight increase of histiocytes and some giant-cell-formations).
Pulpa-meshes: Severe congestion in venous sinuses (so-called blood-sea) and severe edematous swelling of reticulum-fibres, accompanied with diminution of lymphocytes in pulpa-meshes in high degree.

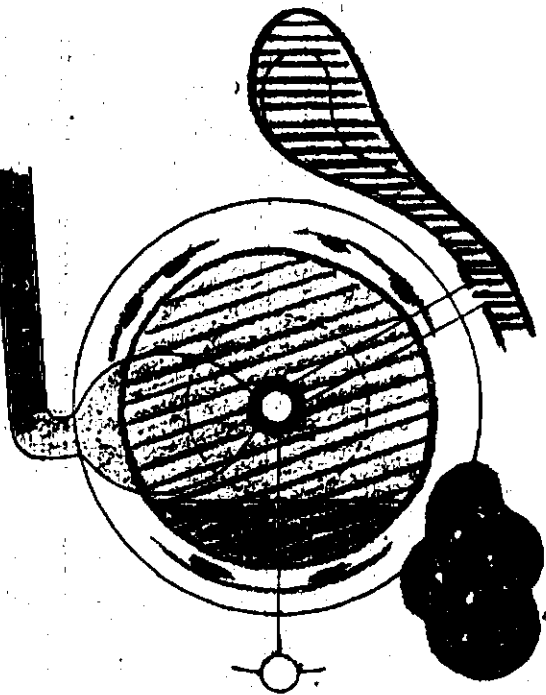
With multiple polar military necrosis.

254.

Multiple military necrosis with slight proliferative processes.

Multiple military glanders-knots at polar portions and intrafollicular tissues. These are totally caseous and structureless in focal parts and surrounded more or less sharply with slight proliferative perifocal cellular reactions (slight hyperplasia or reticulum-fibres, reticulum cells and at some places giant-cell-formations).

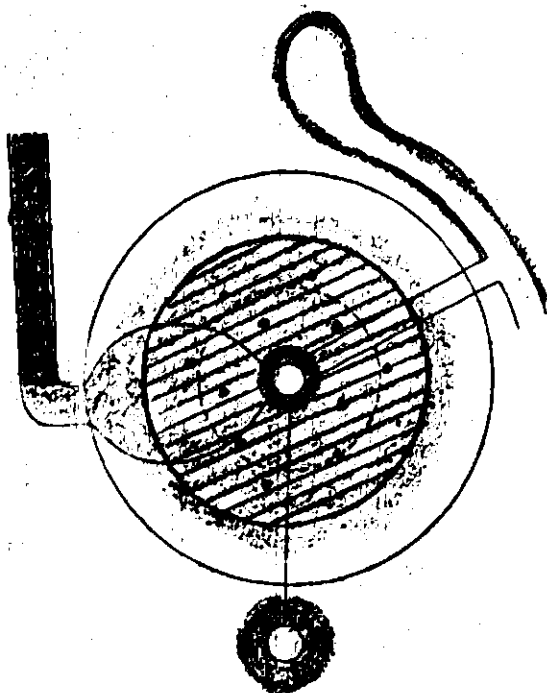
254



Follicles: Considerable reduction of follicles with severe edematous swelling of walls of central arteries, severe perivascular edema, edema of intra- and perifollicular tissues, considerable hemorrhages and at some places submiliary glanders-knots-formation in follicular tissues.

Pulpa-meshes: Considerable congestion in sinuses, remarkable blood-sea and edematous swelling of reticulum-fibres, accompanied with slight hyperplasia of reticulum-fibres and histiocytic cells

727



at some localised places.

With multiple miliary glanders-knots in slight proliferative type.

727.

Follicles: Considerable reduction of follicles with considerable hyalinous degeneration of central arteries and intra- (esp. periarterial) and perifollicular tissues, accompanied with remarkable diminution of follicular lymphocytes.

Pulpa-meshes: Considerable congestion and remarkable blood-sea. Considerable edema (esp. our so-called polar edema) and edematous swelling of reticulum-fibres.

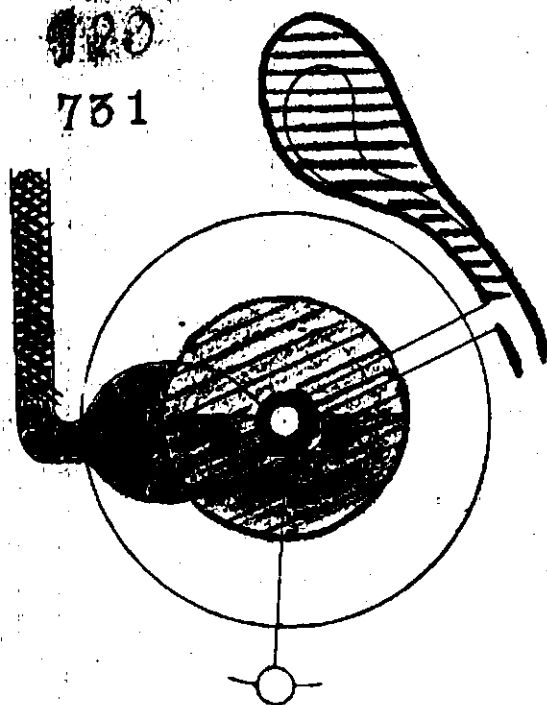
731.

Multiple supermiliary or pea-large, confused glanders-knots with severe hemorrhagic perifocal reactions.

These are severely structureless and necrotic in focal parts and surrounded with severe hemorrhagic perifocal changes.

Follicles: Severe reduction of follicles with severe edematous or hyalinous swelling of central and penicilliary arteries and intra-(esp. periarterial) and perifollicular edema, perivascular multiple hemorrhages, emigration of leucocytes and severe diminution of follicular lymphocytes.

Pulpa-meshes; Considerable congestion and remarkable blood-sea with severe emigration of leuco-



[REDACTED]

S U M M A R Y .

(I) [REDACTED]

I think, the pathological changes of spleen developed in the following processes : namely,

A) NOXIS (bacteria and agens) in Blood.

B) DISTURBANCES OF BLOOD VESSEL SYSTEMS.

At first, at central arteries of follicles and penicilliar arteries.

a) CHANGES OF WALLS.

Hyalinous or edematous swelling of walls.

b) EXSUDATIVE CHANGES OF PERIVASCULAR TISSUES IN FOLLICLES.

Perivascular edema.

Perivascular hemorrhages.

Perivascular wandering cells-accumulations.

Perivascular necrosis. (milliary necrosis, so-called glanders-Knots.)

Then these perivascular localised changes proceed to the following diffuse changes : namely.

C) DISTURBANCES OF FOLLICLES.

c) DIFFUSE EXSUDATIVE CHANGES IN FOLLICLES.

Edematous swelling of tissues.

Haemorrhages.

Wandering cells disseminations. [REDACTED]

Necrosis. (multiple confused milliary necrosis).

Diminution of follicular lymphocytes. [REDACTED]

[REDACTED]

D) DISTURBANCES OF BILOTH'S CORDS.

d) EXSUDATIVE CHANGES IN PULPA-MESHS.

stasis.

Leakages of erythrocytes (so-called blood-sea).

Hemosiderosis.

Edema, serous exsudation.

Edematous swelling of reticulum-fibres.

Wandering cell disseminations.

Leucocytes-dissemination.

Myelocytes-appearance: (myeloid metaplasia).

Diminution of lymphocytes in pulpa-meshs.

Necrosis in pulpa-meshs.

After these exsudative changes, occurred slightly rather proliferative changes in follicles and cords.

E) PROLIFERATIVE CHANGES IN FOLLICLES.

Hyperplasia of histiocytes.

Hyperplasia of plasma cells.

Hyperplasia of connective tissues.

F) PROLIFERATIVE CHANGES IN BILLOTH'S CORDS.

Hyperplasia of reticulum-cells and reticulum-fibres.

Hyperplasia of plasma cells.

Etc. (More chronic changes).

[REDACTED]

Folliculo-splenitis exsudativa with slight proliferative tendency :

with some histiocytic cell in follicles. 8 cases.

with some increased reticulum cells or-fibres. 2 cases.

with some plasma cells reactions, esp. at perifollicular portions (our so-called " polar plasma cells reactions") 0 cases.

[REDACTED]

e) On our so-called polar changes of spleen.

Our so-called polar portions (perifollicular tissues and peri-penicilliar tissues) correspond to so-called "intercalary portions of spleen", so I say. Generally the intercalary portions are the favorite-seats of various cellular changes : inflammatory, degenerative and regenerative changes.

Angio-folliculitis with remarkable polar edema. 10 cases.

" with remarkable polar hemorrhages. 2 cases.

" with some polar milliary necrosis. 2 cases.

" with considerable plasma cells reactions.

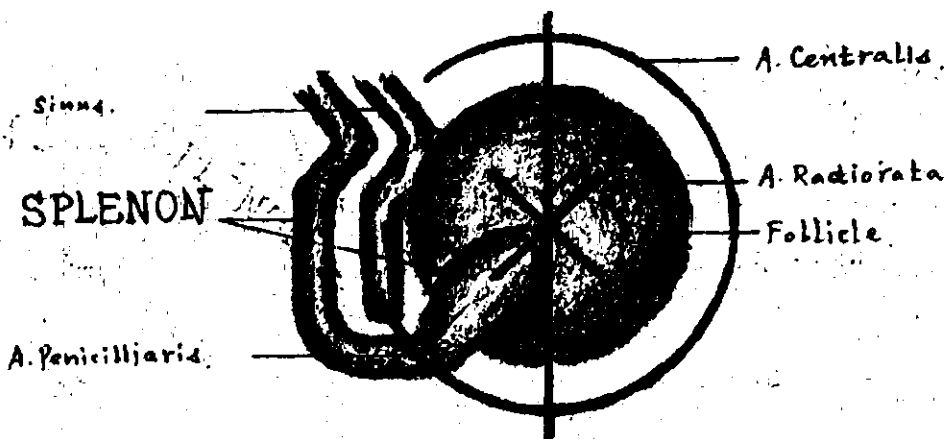
0 cases.

[REDACTED]

[REDACTED]

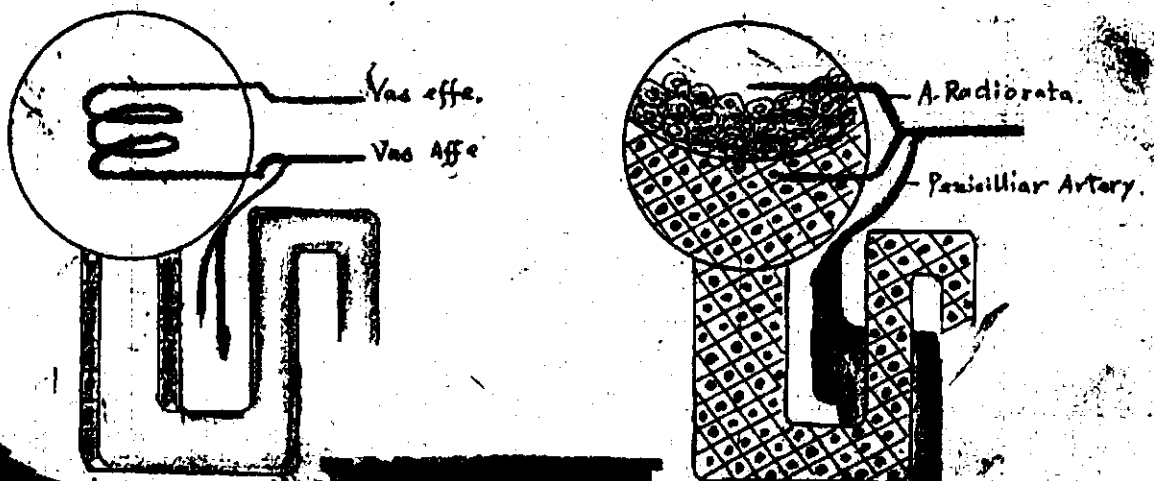
(III)

I prefer " SPLENON ", as functional-anatomical unit of spleen.
The general sketch of splenon is as following.



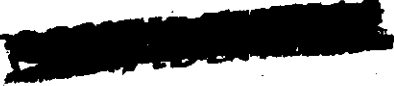
I point out as splenon, a) the attachment-areas of A. radiata (branch of A. centralis) in follicles and b) Billroth's cords, attached to these follicular sections.

These structures of splenon are completely analogenous to the NEPHRON, functional-anatomical unit of kidney.





Based on these facts,



NEPHRON

SPLENON

Afferent
arterie.

Vasa afferens.

A. radiolata.

A. penicilliaris.

Filtration-
part

Glomerulus.

Germinative centres.

Transport-
part.

Tubulus.

Billot's cords.

Glomerulitis

Angio-folliculitis °

Tubulitis
(Nephrose).

Fasciculitis
(Splense) °

Glomerulo-nephrose.

Folliculo-fasciculitis.
(Folliculo-Splense)

Polar-complex. °°

Polar-complex.

Nephro-cirrhosis.

Spleno-cirrhosis
(Banti's disease).



[REDACTED]

•) I classified the changes of spleen, according to such my concept, Angio-folliculitis and Fasciculitis. [REDACTED]

••) Explaining of "polar-complex", concerned in our stand-point on "inflammation"-concept, should be described later in the chapter of kidney.



(IV).

The bird's-eye views of all splenal changes are as following.





The bird's eye view of all investigated cases , 

18. **Angio-folliculitis** Hemorrhagic changes in slight degree.
haemorrhagico-exsudativa. Exudative changes in medium degree.

Fasciculitis exsudativa. Exudative changes in medium degree.
with some leucocytes dissemination.
with some necrotic changes.

50. **Angio-folliculitis** Hemorrhagic changes in slight degree.
haemorrhagico-exsudativa. Exudative changes in medium degree.
with polar edema in slight degree.
with polar hemorrhages
in slight degree.

Fasciculitis Hemorrhagic changes in severe degree.
haemorrhagico-exsudativa. Exudative changes in severe degree.
with some leucocytes dissemination.

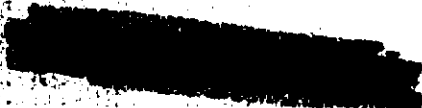
85. **Angio-folliculitis**
exsudativa. Exudative changes in severe degree.
with some leucocytes dissemination.
with polar edema in severe degree.
with polar hemorrhages
in medium degree.

Fasciculitis
haem exsudativa. Exudative changes in severe degree.
with intense leucocytes dissemination.

146. **Angio-folliculitis** Hemorrhagic changes in slight degree.
haemorrhagico-exsudativa. Exudative changes in severe degree.
with polar edema in severe degree.
with slight proliferative tendency.

Fasciculitis exsudativa. Exudative changes in severe degree.
with some leucocytes dissemination.

152. **Angio-folliculitis**
exsudativa. Exudative changes in severe degree.
with polar edema in severe degree.
with slight proliferative tendency.



[REDACTED]

Fasciculitis exsudativa.

Exudative changes in severe degree.
with some leucocytes dissemination,
with some myeloid metaplasia,
with slight proliferative tendency.

167. Angio-folliculitis

Exudative changes in severe degree.
with some leucocytes dissemination,
with polareedema in severe degree,
with slight proliferative tendency.

Fasciculitis

Hemorrhagic changes in medium degree.
Exudative changes in severe degree,
with intense leucocytes dissemination,
with slight proliferative tendency.

178. Angio-folliculitis

Hemorrhagic changes in medium degree.
Exudative changes in severe degree.

Fasciculitis
haemorrhagico-exsudativa.

Hemorrhagic changes in slight degree.
Exudative changes in severe degree,
with some leucocytes dissemination.

180. Angio-folliculitis
exsudative.

Exudative changes in severe degree.
with slight proliferative tendency.

Fasciculitis exudative.

Exudative changes in medium degree.
with some leucocytes dissemination,
with slight proliferative tendency.

190. Angio-folliculitis
haemorrhagico-exsudativa.

Hemorrhagic changes in slight degree.
Exudative changes in severe degree,
with polar edema in medium degree,
with slight proliferative tendency.

Fasciculitis exudative.

Exudative changes in severe degree.
with some leucocytes dissemination,
with slight proliferative tendency.

[REDACTED]

193. **Angio-folliculitis**
haemorrhagico-exsudativa. Hemorrhagic changes in medium degree.
Exudative changes in severe degree.
with slight proliferative tendency.

[REDACTED]

Fasciculitis
haemorrhagico-exsudativa. Hemorrhagic changes in medium degree.
Exudative changes in severe degree.
with slight proliferative tendency.

221. **Angio-folliculitis**
haemorrhagico-exsudativa. Hemorrhagic changes in medium degree.
Exudative changes in severe degree.
with some leucocytes dissemination.
with some polar edema.

Fasciculitis
haemorrhagico-exsudativa. Hemorrhagic changes in medium degree.
Exudative changes in severe degree.
with intense leucocytes dissemination.
with slight proliferative tendency.

222. **Angio-folliculitis**
haemorrhagico-exsudativa. Hemorrhagic changes in slight degree.
Exudative changes in severe degree.
with slight leucocytes dissemination.

Fasciculitis
haemorrhagico-exsudativa. Hemorrhagic changes in severe degree.
Exudative changes in severe degree.
with leucocytes dissemination
in medium degree.
with slight proliferative tendency.

224. **Angio-folliculitis**
haemorrhagico-exsudativa. Hemorrhagic changes in medium degree.
Exudative changes in severe degree.
with slight leucocytes dissemination.
with intense polar edema.

Fasciculitis exsudativa. Exudative changes in severe degree.
with intense leucocytes dissemination.
with some myeloid metaplasia.

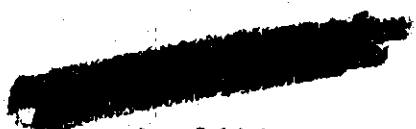
[REDACTED]

[REDACTED]



229. **Angio-folliculitis
haemorrhagico-exsudativa.
et necroticans.**

Hemorrhagic changes in medium degree.
Exudative changes in severe degree.
Necrotic changes in medium degree.
(miliary necrosis)
with some leucocytes dissemination.
with polar miliary necrosis.



**Fasciculitis
haemorrhagico-exsudativa.**

Hemorrhagic changes in medium degree.
Exudative changes in severe degree.
with intense leucocytes dissemination.
with slight proliferative tendency.

229. **Angio-folliculitis
necroticans.**

Necrotic ruins of angio-follicular tissues.

Fasciculitis necroticans.

Necrotic changes all over the fascicular tissues.

254. **Angio-folliculitis
haemorrhagico-exsudativa.**

Hemorrhagic changes in medium degree.
Exudative changes in severe degree.
with polar miliary necrosis.
with some polar edema.
with some leucocytes dissemination.

Fasciculitis

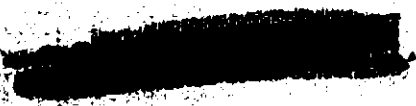
Exudative changes in severe degree.
with multiple miliary necrosis,
in rather proliferative form.
with some leucocytes dissemination.

227. **Angio-folliculitis
haemorrhagico-exsudativa.**

Hemorrhagic changes in slight degree.
Exudative changes in severe degree.
with polar edema.
with leucocytes dissemination
in medium degree.

Fasciculitis exsudativa.

Exudative changes in severe degree.
with intense leucocytes dissemination.



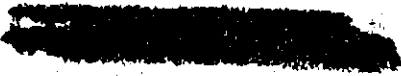
[REDACTED]

731. **Angio-folliculitis**
haemorrhagico-exsudativa
et necroticans.

Hemorrhagic changes in medium degree.
Exudative changes in medium degree.
Necrotic changes at some places.

Fasciulitis
[REDACTED]

Exudative changes in medium degree.
with diffuse necrosis.
with some leucocytes dissemination.



Accordingly.

I)

Angio-folliculitis

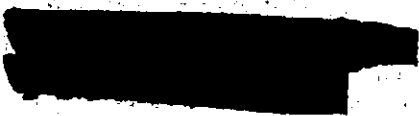
exsudativa	17	cases.
in slight degree.	0	cases.
in medial degree.	3	cases.
in severe degree.	14	cases.
with leucocytes-emigrations.	8	cases.
with milliary necrosis.	3	cases.
with hemorrhage, Angio-folliculitis hemorrhagico-exsudativa.	14	cases.
in slight degree.	6	cases.
in medial degree.	6	cases.
in severe degree.	0	cases.

Angio-folliculitis with remarkable polar changes.

	14	cases.
with remarkable polar edema.	10	cases.
with remarkable polar hemorrhages.	2	cases.
with some polar milliary necrosis.	2	cases.
with considerable polar plasma cells reaction	0	cases.

Angio-folliculitis with slight proliferative tendency.

8 cases.



2)

Fasciulitis



exsudativa, 17 cases.

in slight degree. 0 cases.

in medial degree. 3 cases.

in severe degree. 14 cases.

with so-called "blood-sea", Fasciulitis hemorrhagica. 7 cases.

in slight degree. 1 cases.

in medial degree. 4 cases.

in severe degree. 2 cases.

with leucocytes-dissemination 16 cases.

in slight degree. 8 cases.

in medial degree. 3 cases.

in severe degree. 5 cases.

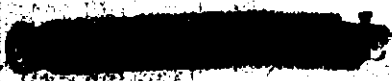
with myeloid metaplasia. 2 cases.

with multiple miliary necrosis 4 cases.

in rather exsudative form. 1 cases.

in rather proliferative form. 3 cases.

with slight proliferative tendency 8 cases.





3) Classification of splenal changes according to "Folliculo-Fasciculitis"-concept, analogenous to "Glomerulo-nephrosis" in kidney.

Folliculo-Fasciculitis exsudativa	17	cases.
in slight degree.	0	cases.
in medial degree.	3	cases.
in severe degree.	14	cases.

with hemorrhages. Folliculo-fasciculitis hemorrhagico-exsudativa.

	12	cases.
in slight degree.	4	cases.
in medial degree.	6	cases.
in severe degree.	2	cases.

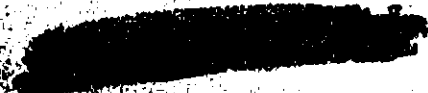
with leucocytes-disseminations. Folliculo-fasciculitis Supprativa.

	16	cases.
in slight degree.	8	cases.
in medial degree.	3	cases.
in severe degree.	5	cases.
with myeloic metaplasia.	2	cases.

with multiple milliary necrosis.

	5	cases.
in rather exsudative form.	2	cases.
in rather proliferative form.	3	cases.

with slight proliferative tendency.



[REDACTED]

... ..

[REDACTED]

Consequently, the main pathological findings are considerable exsudative (at sometimes, hemorrhagico-exsudative) changes, accompanied at some times with glanders-knots formations (in rather exsudative form).

[REDACTED]

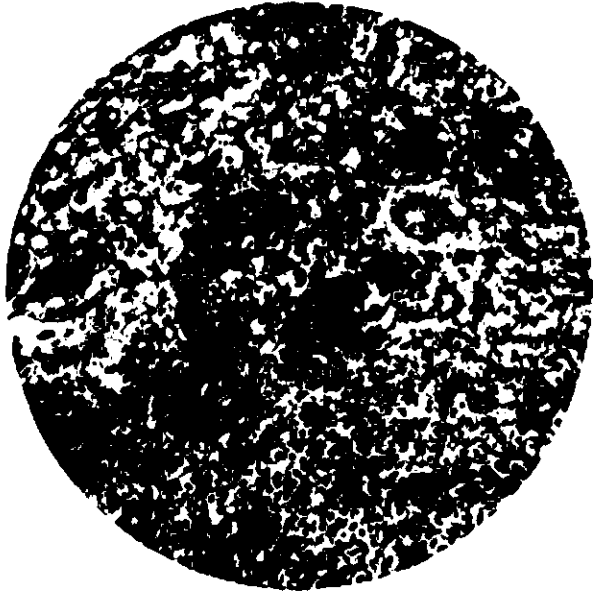
[REDACTED]

SPLEEN

		16	50	85	146	152	167	178	180	190	193	221	222	224	229	254	727	731	
Capsule	Thickness	+	+	N	+	+	+	+	+	N	(#)	N	+	+	+	N	N	+	
	Curve	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trabeculae	Blood Vessels	Thickness	+	N	N	N	+	+	+	+	+	N	+	+	+	N	+	+	
		Congestion	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		Swelling of Walls	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		Loosening of Walls	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		Hyaline Degeneration	+	(#)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Reticulum	Hyperplasia		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Swelling		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Hyaline Degeneration		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Reticular Cells	Hyperplasia in Follicles	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
perifollicular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
peritrabecular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Follicles	Size		+	+	N	(#)	(#)	(#)	(#)	(#)	(#)	(#)	(#)	(#)	(#)	(#)	(#)	(#)	
	Number		+	+	N	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Decrease of Lymphocytes		+	+	+	+	(#)	+	+	+	+	+	+	+	+	+	+	+	
	Edema	in Follicles	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		perifollicular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Hemorrhage	in Follicles	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		perifollicular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Histiocytes	in Follicles	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		perifollicular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Central Artery	Congestion		+	+	+	(#)	+	+	+	+	+	+	+	+	+	+	+	
		Endothelium	Swelling	(#)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
			Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
			Desquamation	+	+	+	(#)	+	+	+	+	+	+	+	+	+	+	+	+
		Walls	Swelling	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
			Loosening	(#)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyaline Degeneration			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
EXIST of Germinating Center		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Necrosis	central	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	peripheral	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Cavernous Sinuses	Width		+	+	+	(#)	+	+	+	+	(#)	+	(#)	+	(#)	(#)	+		
	Cavernous Sinuses		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Congestion		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Cellular Inclusion	Leucocytes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Lymphocytes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Histiocytic Cells	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Endothelium	Swelling	(#)	+	+	+	+	+	+	+	(#)	(#)	+	+	+	+	(#)	+		
	Resolution	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Phagocytosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Billroth's Cord	Edema		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Hemorrhage		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Necrosis		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Lymphocytes		+	+	+	+	(#)	+	(#)	(#)	+	+	+	+	+	+	+		
	Leucocytes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Plasma Cells		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Splenocytes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Reticular Cells		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Hemosiderosis		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			

[REDACTED]

Our so-called polar edema;
intense edematous swelling of penicillar
artery walls and intense edematous
swelling around penicillar arteries.

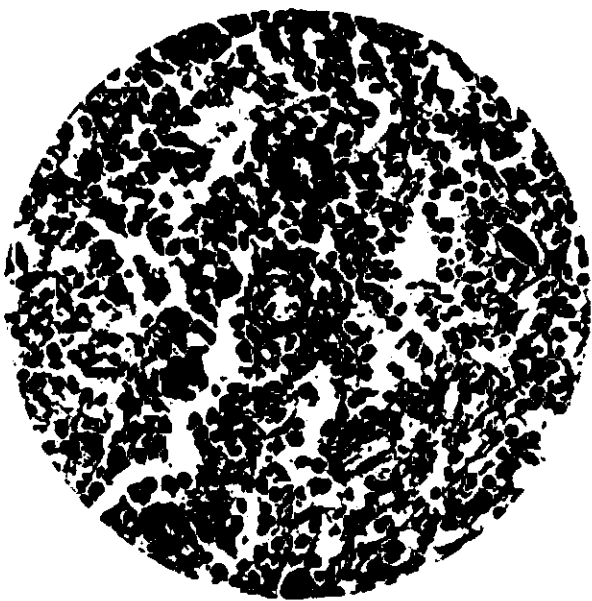


R. 152

X 170

[REDACTED]

Edematous swelling of penicillar artery
walls.
Polar edema, in high power.



R. 193

X 320

[REDACTED]

[REDACTED]

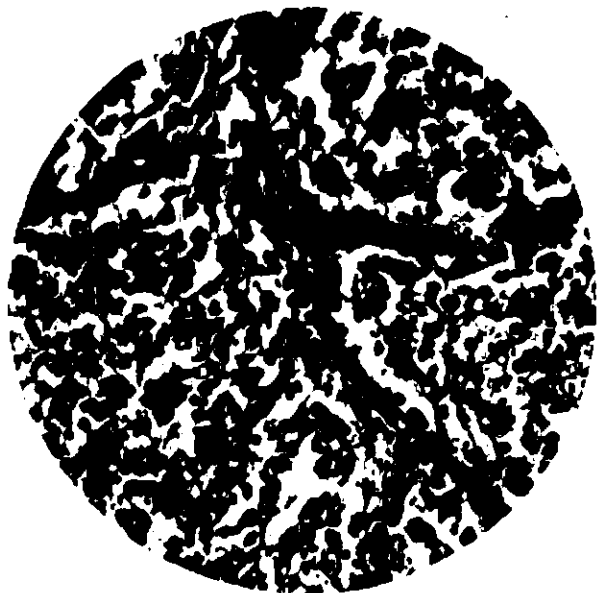
[REDACTED]

234

[REDACTED]

Hyperplasia of adventitia cells, of
A. radiolata (branch of A. centralis
in germinative center) and some
reticulum cells.

[REDACTED]

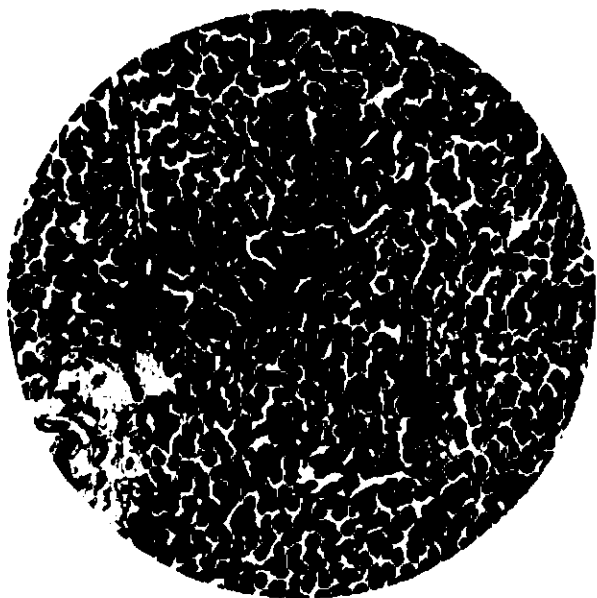


R 16

x 310

Hyperplasia of adventitia cells of
A. radiolata and some reticulum cells.

[REDACTED]

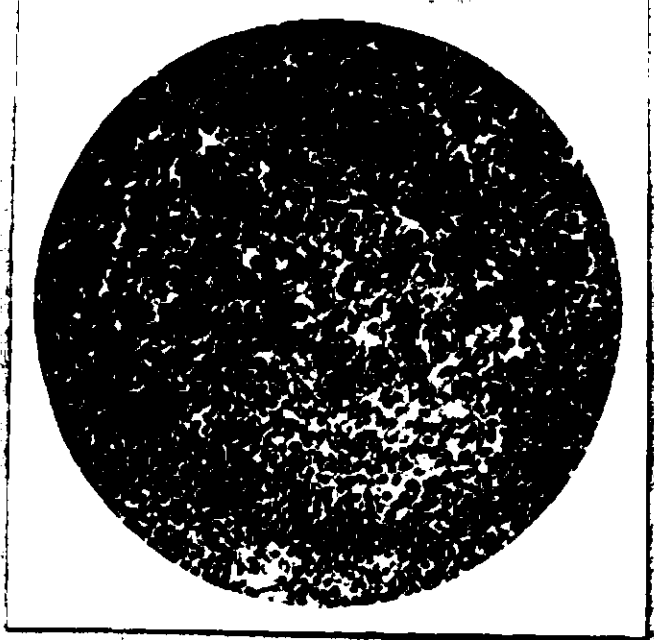


R 85197

x 360

~~REDACTED~~

Reactive hyperplasia of germinative
centre, in high power.
Remarkable hyperplasia of reticular cells,
in epithelial cell form.



R150 *x 230*

Hyalinously degenerated parts in follicle.



~~REDACTED~~

236 *x 210*

[REDACTED]

Edematous swelling of central artery walls.

[REDACTED]



R 85 1a7

x 160

Hyalinous degeneration of central artery wall.



R 227

x 340

[REDACTED]

237

[REDACTED]

Glanders-knot in follicular tissues.
Caseous central focus and the margin
portion of knot with some giant cells.

[REDACTED]



R 229 (a)

X 210.

Diffuse intense necrosis of follicular
tissues.



[REDACTED]

[REDACTED]

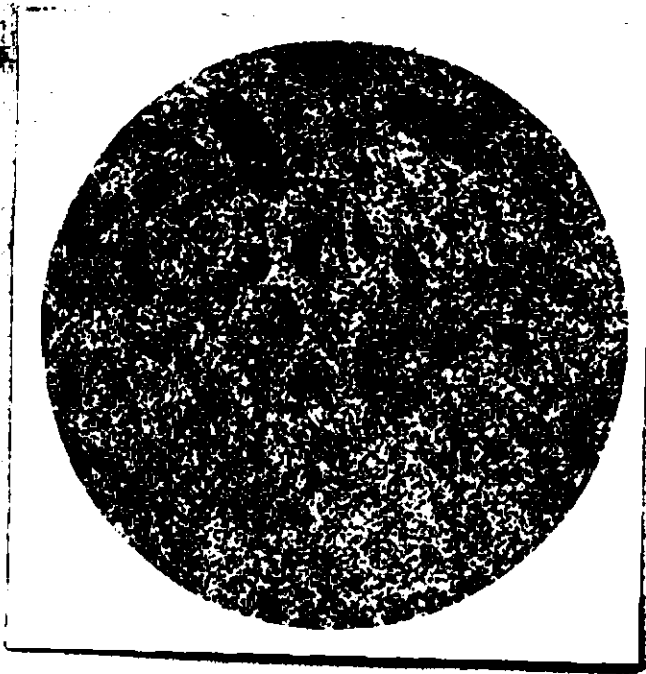
238

X 70

[REDACTED]

Fasciculitis exsudativa with intense edema in fascicular cords and intense stasis in sinuses.

[REDACTED]



R 50 x 90

Sinus-ectasia with intense stasis.
In high power.



[REDACTED]

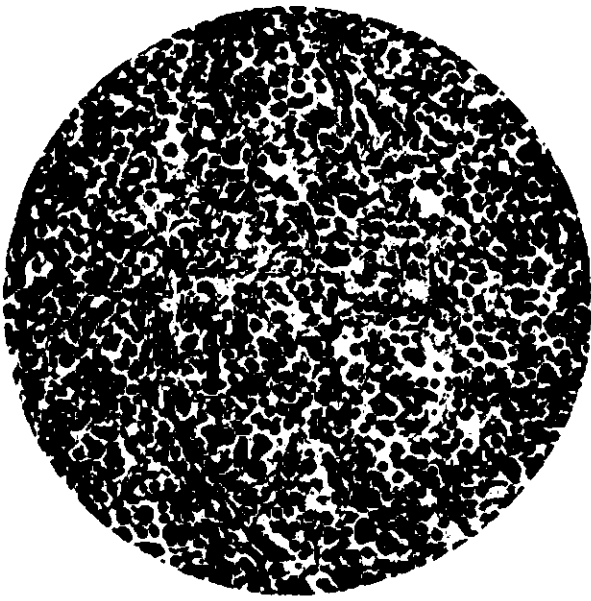
R 14 x 400

[REDACTED] 239

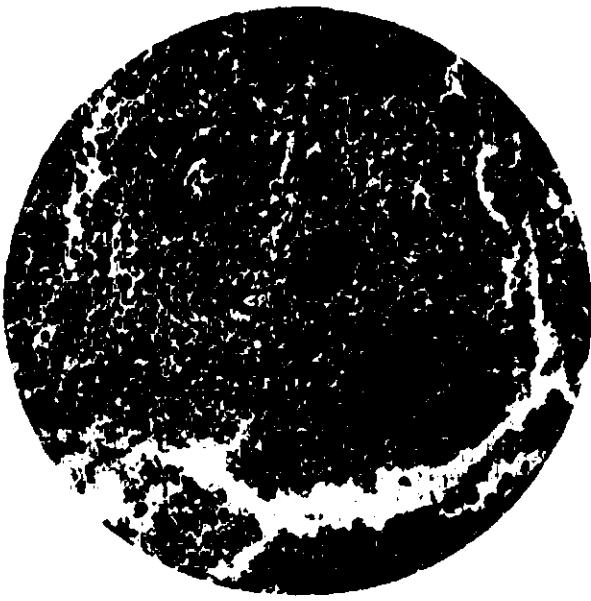
[REDACTED]

Considerable hyperplasia of wall cells
of penicillar artery.
Considerable proliferative reaction
at polar portion.

[REDACTED]



R 180 x 260
Hyalinous degeneration of penicillar
artery wall-.



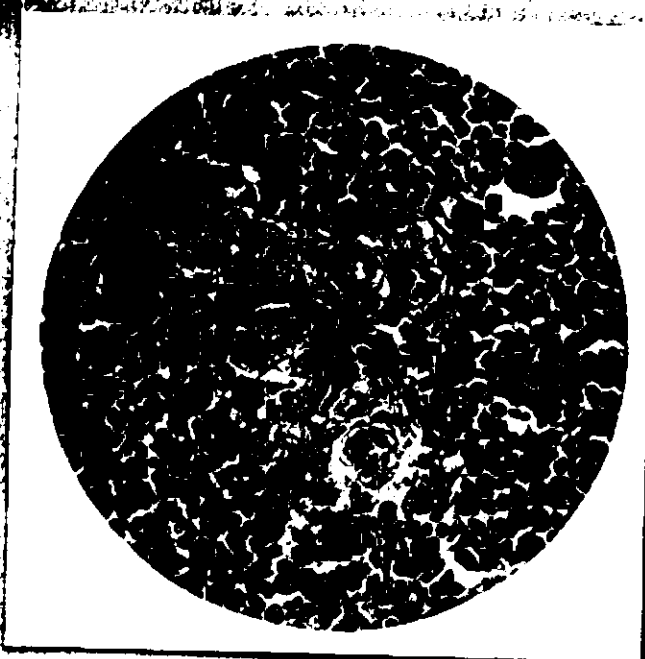
[REDACTED]

R 229 (a) x 240
[REDACTED] 240

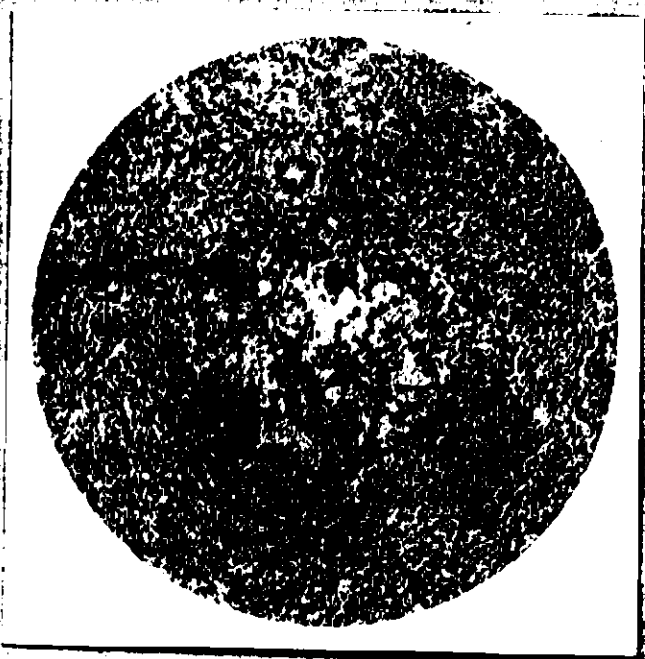
[REDACTED]

Proliferative reaction around [REDACTED]
Some increased reticular cells and
some increased adventitia cells.

[REDACTED]



R 85 (b) X 380
Hyalinously degenerated follicles.

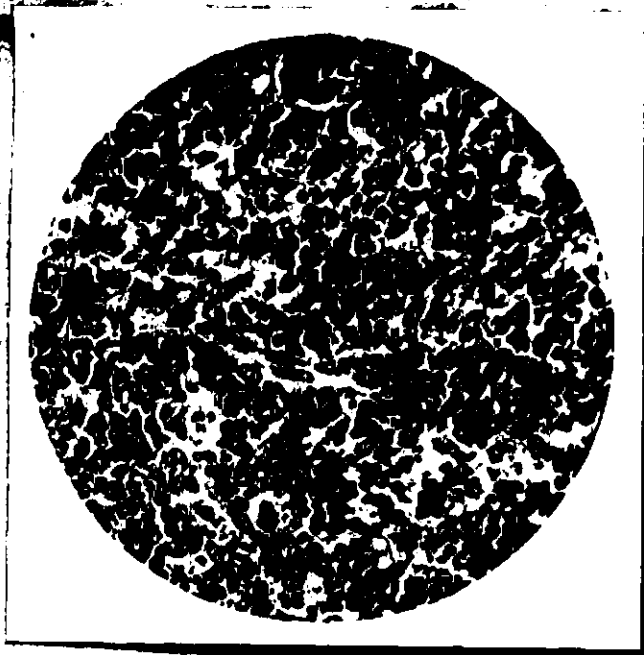


[REDACTED] X 100
[REDACTED] 241

[REDACTED]

Proliferative reaction at polar portion.
Some increased reticulum cells.

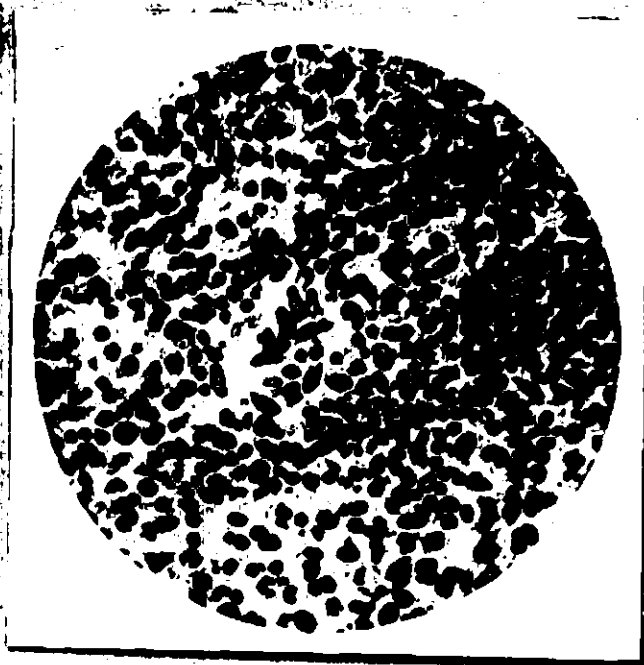
[REDACTED]



R 85(b)

X 390

Proliferative reaction at polar portion
with some increased reticulum cells.



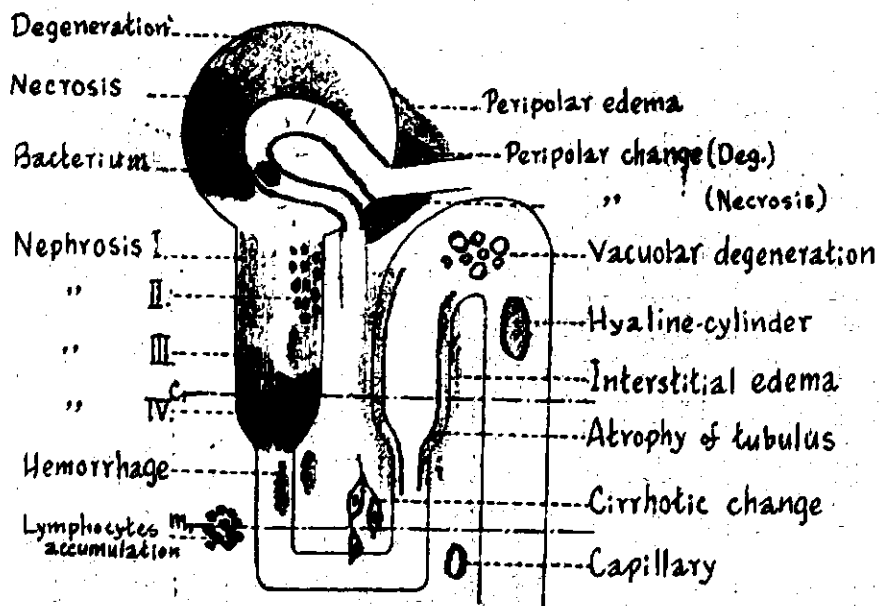
[REDACTED]

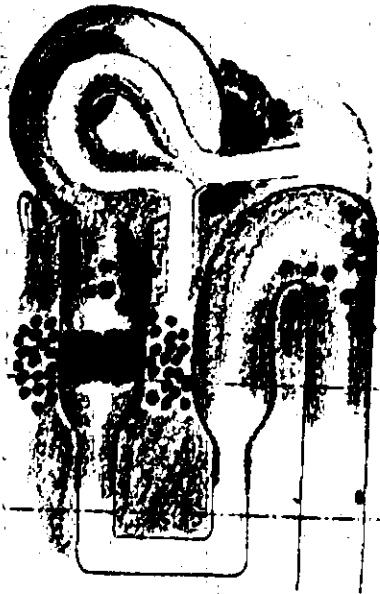
[REDACTED]

242

X 380

Kidney





K I D N E Y .

(A) Microscop. Investigation.

I46.

Slight Glomerulo-nephrosis (mainly in degenerative form) with slight our so-called peripolar changes and Nephrosis in Ist stage, some places in II stage with some erythrocytes-leakages and some places in IV th stage with remarkable interstitial edema and considerable multiple round-cells-accumulation.

I52.

Slight or at some places considerable Glomerulo-nephrosis (glomeruli mainly in degenerative form) with considerable our so-called peripolar changes.

Nephrosis in I. stage and at some places in III. stage with considerable interstitial edema.

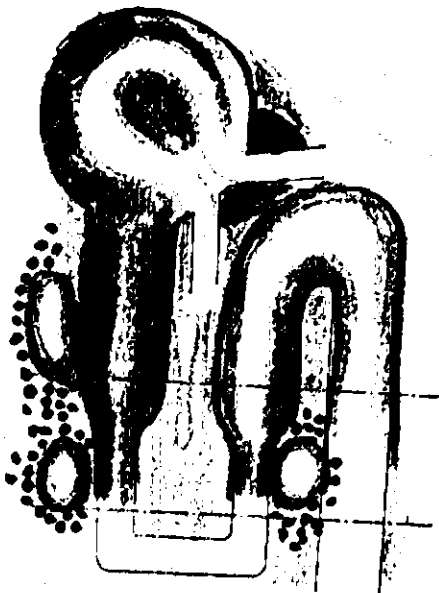
I67.

Considerable Glomerulo-nephrosis (glomeruli in rather degenerative form) with considerable our so-called peripolar changes.

Nephrosis in I. stage with considerable interstitial edema.

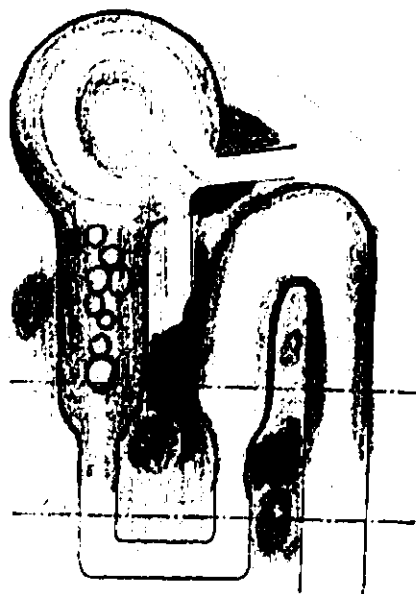


[REDACTED]



I76. [REDACTED]

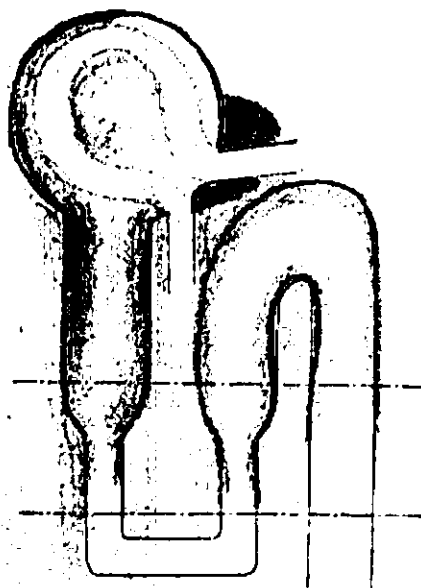
Considerable Glomerulo-nephrosis (glomeruli in rather degenerative form) with considerable our so-called peripolar changes and Nephrosis in I. stage with considerable interstitial edema, accompanied with fibrinous swelling of blood-vessel-walls and considerable perivascular round-cells accumulations.



I78.

Slight Glomerulo-nephrosis (glomerular loops in rather degenerative form) with slight our so-called peripolar changes.

Nephrosis in I. stage (at some places partial vacuolar changes of tubular epithel iums) and considerable interstitial edema, accompanied with remarkable edema at some places and localised bio-necrotic swelling of connective tissues at some places.



I80.

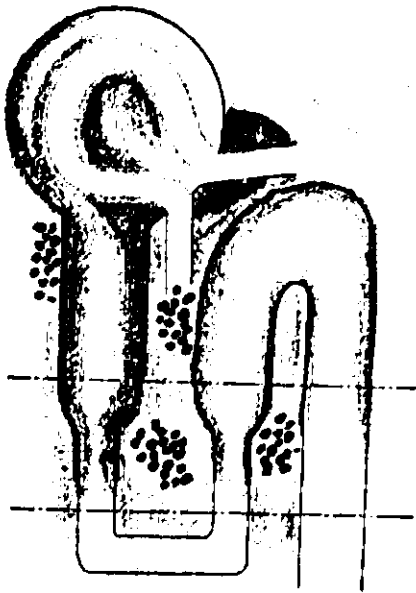
Slight Glomerulo-nephrosis (glomeruli in rather degenerative form) with slight our so-called peripolar changes.

Nephrosis in I. stage with consdierable interstiti al edema.

[REDACTED]

[REDACTED]

190



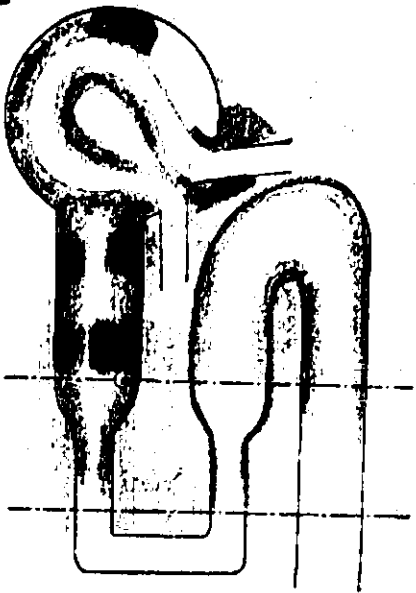
190.

Slight Glomerulo-nephrosis (mainly in degenerative form) and slight our so-called peripolar changes. ~~_____~~

Nephrosis in I. stage and considerable interstitial edema, accompanied with considerable multiple round-cell-accumulations.

193.

193



Considerable Glomerulo-nephrosis (glomeruli mainly in degenerative form) with considerable our so-called peripolar changes and Nephrosis in I. stage or at some places in III. stage with remarkable interstitial edema.

205.

Considerable Glomerulo-nephrosis with considerable congestion (glomeruli in hyperaemic form) with slight peripolar changes and Nephrosis in I. stage with considerable interstitial edema and considerable round-cell-accumulations.

207.

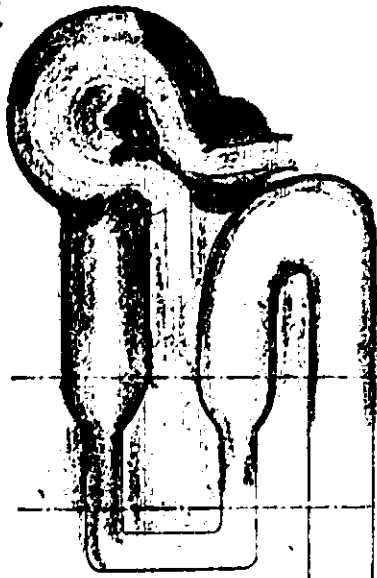
205



Slight Glomerulo-nephrosis (mainly in degenerative form) with slight our so-called peripolar changes and Nephrosis in I. stage with considerable interstitial edema. ~~_____~~

[REDACTED]

222

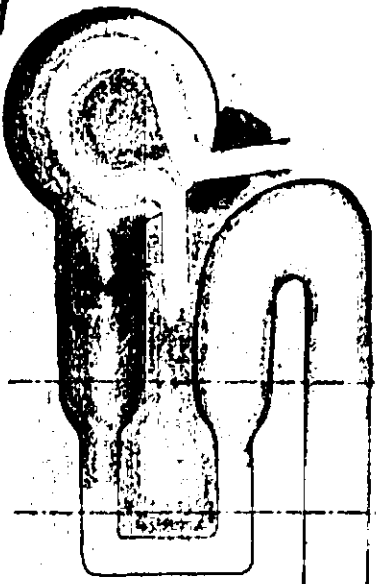


221. missed [REDACTED]

222.

Considerable Glomerulo-nephrosis (some glomeruli in acute hyperaemic form and some in rather exudative form) with considerable peripolar changes (remarkable hyperaemia of vasa afferens). Nephrosis in I st. stage with considerable interstitial edema.

229



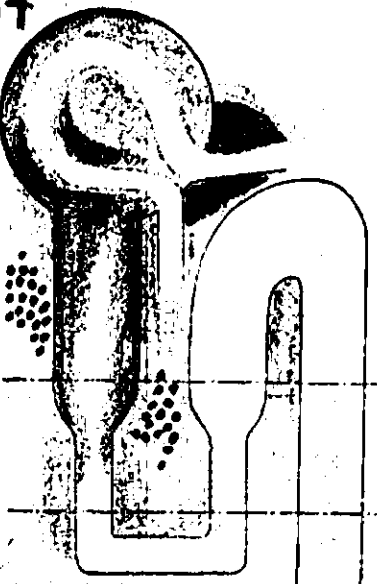
224.

Considerable Glomerulo-nephrosis (mainly in degenerative form) with slight peripolar changes and Nephrosis in I. stage with considerable interstitial edema.

229.

Considerable Glomerulo-nephrosis (mainly in acute form) with some our so-called peripolar changes and Nephrosis in I. stage or at some places in II. stage with considerable interstitial edema.

254



254.

Considerable Glomerulo-nephrosis (some glomeruli in exudative form, some in rather degenerative form) with considerable our so-called peripolar changes.

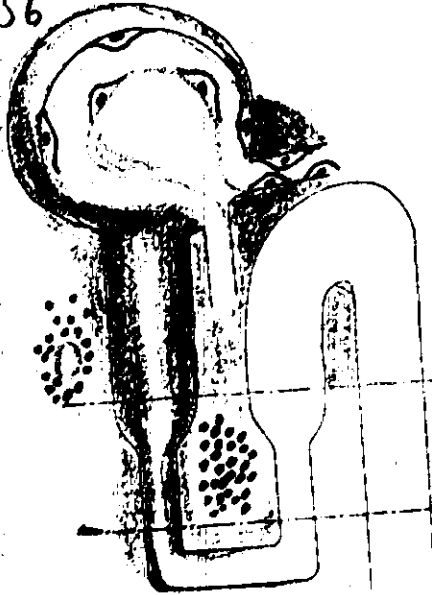
[REDACTED]

[REDACTED]

247

[REDACTED]

256



Nephrosis in I. stage with considerable interstitial edema and some round-cell-accumulations.

[REDACTED]

256.

Considerable Glomerulo-nephrosis (some glomeruli in proliferative form) with considerable peripolar changes (considerable our so-called peripolar edema and considerable proliferation of adventitial cells of Vasa afferens).

727



Nephrosis in I. stage with considerable interstitial edema and considerable round-cell-accumulations (perivascular round-cell-accumulations).

727.

Considerable Glomerulo-nephrosis (mainly in exsudative form) with considerable our so-called peripolar changes.

Nephrosis in I. stage or at some places in III rd stage with considerable interstitial edema.

731.

Considerable Glomerulo-nephrosis (mainly in rather degenerative form) with slight or considerable our so-called peripolar changes.

(esp. some remarkable round-cell-accumulations at peri-glomerular portions and these glomeruli

[REDACTED]

248

[REDACTED]

falled into hyaline cirrhosis).

[REDACTED]

Nephrosis in I. stage with considerable interstitial edema.

[REDACTED]

S U M M A R Y

A) Tubular changes :

Generally occurred some cloudy swelling of tubular epitheliums, with some various cylinders in tubular spaces. [REDACTED]

Nephrosis I.degree	18 cases(all investigated cases).
Nephrosis II. degree	2 cases of them.
Nephrosis III.degree.	
with partialbionecrotic swelling.	5 cases of them.
with partial necrotic changes.	I case of them.

tubular contents.	Protein-masses.	Hyaline cylinders.	Calcinated masses
-----	-----	-----	-----
very small quantity	1	1	1
small quantity	8	1	
medium quantity	4	11	4
large quantity	5	7	1

B) Glomerular changes.

Generally occurred some glomerular changes : glomerulo-nephrosis Randerath's v with some edematous swelling of capillary walls of glomerular loops, swelling and slight increase of capillary wall-cells and some serous exsudation in Bowmann's spaces. [REDACTED]

[REDACTED]

Glomerulo-nephrosis.

in very slight degree.	0 cases.	[REDACTED]
in slight degree.	10 cases.	[REDACTED]
in medium degree.	6 cases.	
in severe degree.	2 cases.	

Peripolar changes :

in slight very degree.	1 case.	
in slight degree.	11 cases.	
in medium degree.	3 cases.	
in more or less intense degree.	3 cases.	

C). Interstitium.

Some cases with slight perivascular edema or some hemorrhages.
Some cases are accompanied with some round cell accumulation and
I case (No. 176) with remarkable round cell accumulation (Glanders-
knots).

[REDACTED]

[REDACTED]

[REDACTED]

On polar changes :

Our so-called polar portions of kidney fall within like periglomerular areas at afferent portions of blood-vessels, bounded with 2 blood-vessels (V.afferens and defferens) and intercalary portion of tubulus and equipped with special cellular arrangements with neuro-myo-angio-epithelial segments, which belong to so-called diffuse endocrinic system.

[REDACTED]

These areas are very chemoreceptoric, and able to regulate blood-quantity in glomeruli and furthermore favorite-seats of various inflammatory changes.

Noxae, advanced hemotogenously to kidney, cause inflammatory changes firstly at afferent portions, due to their chemoreceptoric properties, then at glomeruli and sometimes at V. defferens.

Thus occurred inflammatory changes angio-vasculally at perivascular portions in Δ -areas.

These noxae are filtrated at glomerular loops, then excreted in tubulus with nephrosis and some of them absorbed again mainly at intercalary portions of tubulus, accompanied with considerable degeneration of tubular epithelial cells and some peritubular inflammatory changes in neighbouring Δ -areas.

Thus occurred inflammatory changes epitheliogenously at peritubular portions in Δ -areas.

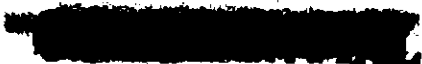
Δ -areas are very sensitive to inflammatory changes, which occurred in 2 manners, a) angiovasculally at perivascular portions with mesenchymal reactions and b) epitheliogenously at peritubular portions with epitheliogenous reactions and accompanied with various complicated changes, due to chemoreceptoric and regenerative properties of these

[REDACTED]

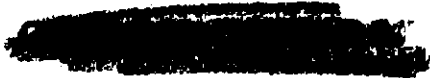


intercalary portions.

In -areas, inflammatory changes apt to be occurred and if occurred, in 2 manners, not only with mesenchymal reactions, but also with epitheliogenous reactions .



Such special cellular arrangements with mesenchymal and epithelial segments which belong to diffuse endocrinic system, are expected to exist in each organs(for example, discovery of "lung-island" by us) and inflammatory changes of these portions are named by us "polar changes" of each organs.



KIDNEY

		85	146	162	167	176	178	180	190	193	205	207	222	22A	22Q	254	256	727	731		
Glomeruli	Glomerular Loop	Dilatation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
		Capillary Walls	Swelling	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Changes of Nuclei	Deposition of Hyaline or Albuminoid Substances	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Increase of Nuclei	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Swelling	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Contents of Capillaries	Pyknosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Erythrocytes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Bowman's Lumen	Round Cells	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Dilatation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Hyaline or Albuminoid Casts	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Epithelium of Bowman's Capsule	Penetrative Fluid	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Cloudy Swelling	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Bowman's Capsules	Proliferation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Swelling	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Vasa afferentia	Endothelial Cells	Hyaline Degeneration	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
		Swelling	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
		Proliferation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Media	Desquamation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Swelling	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Hyaline Degeneration	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Adventitial Cells	Tendency to Necrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Swelling	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Adjoining Portion	Proliferation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Peripolar Edema	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Appearance of "Pockles"	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Parenchyma	Tubules	Macula densa	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
			Cloudy Swelling	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
			Hyaline Droplet Degeneration	(+)	(+)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Vacuolar Degeneration			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fatty Degeneration			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
NECROSIS			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Degenerations of Nuclei			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cloudy or Massive Albuminoid Substances			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fibrinous Substance			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyaline or Colloid Cylinder			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Interstitial	Congestion	Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
		Medulla	(+)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Edema	Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Medulla	(+)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Hemorrhage	Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Round Cell Infiltration	Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Vessel Walls	Hyaline Degeneration	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		Tendency to Necrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Colonies of Bacteria		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		

[REDACTED]

Intense edema in Δ areas.
Our so-called polar edema.

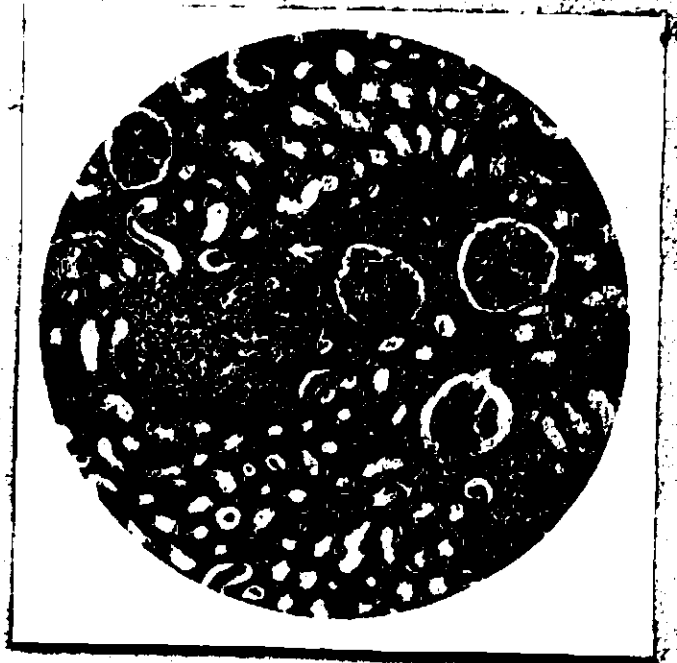
[REDACTED]



-256

x 230

Miliary glanders-knot, at peri-
glomerular portion.



-176

x 70

[REDACTED]

[REDACTED]

255

[REDACTED]

Round cell accumulation at peri-vascular portion.

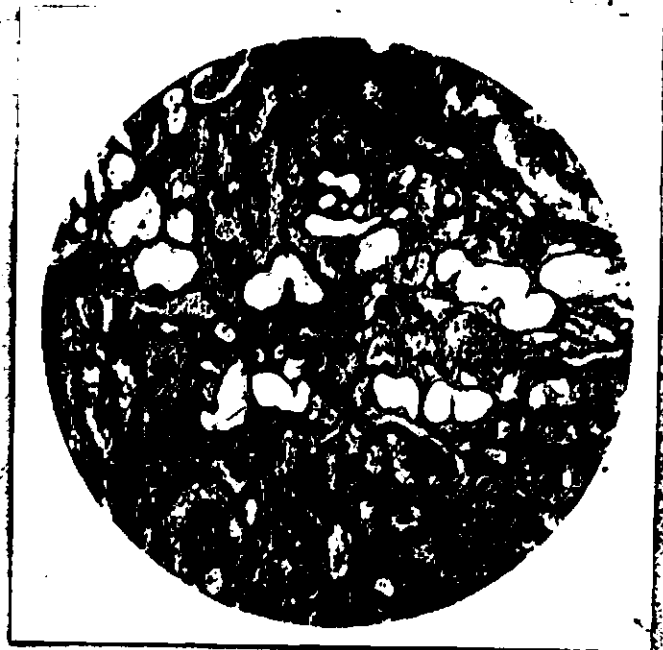
[REDACTED]



256

X12

Calcified masses in cortical tissues.



85

X120

[REDACTED]

[REDACTED]

256

[REDACTED]

Miliary glanders-knot, in
high power.

[REDACTED]



176

x 240

Round cell accumulation at peri-
glomerular portion.



[REDACTED]

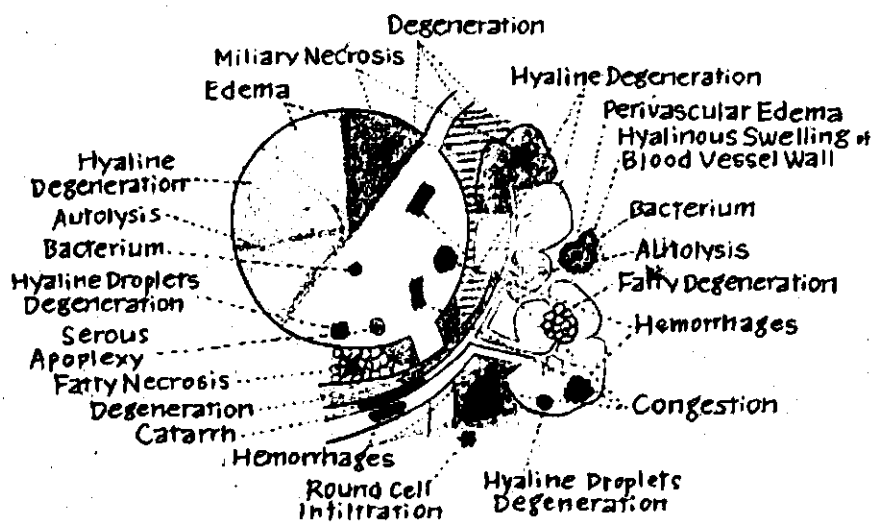
731

x 70

[REDACTED]

257

Pancreas



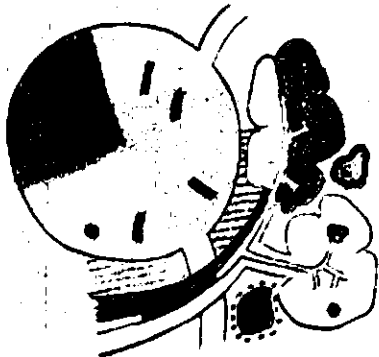
() P A N C R E A S

(2) Microscopical Investigations.

85.

Hyaline^{ous} degeneration of blood-vessel-walls and slight increase of connective tissues, which are in more or less hyalinous degeneration.

Slight degeneration of parenchymatous cells with hyaline-droplets at some places. Considerable vacuolar degeneration of island-cells. Considerable catarrh of efferent ducts.

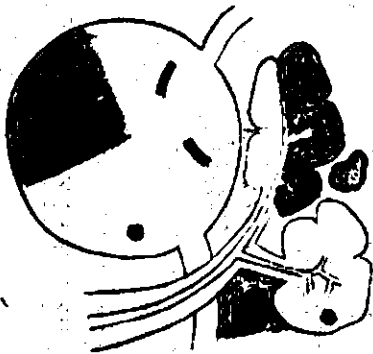


I46.

Slight increase of connective tissues, which are slightly hyalinously degenerative.

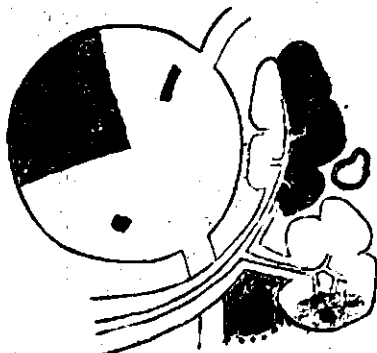
Considerable venous congestion and slight hemorrhages in connective tissues. Slight degeneration of parenchymatous cells.

Considerable hydropic and hyalinous degeneration of island-cells with hyaline-droplets at some places.



[REDACTED]

[REDACTED]

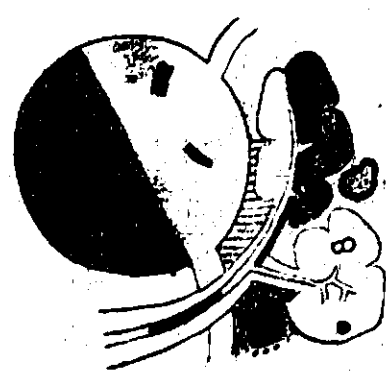


I67.

Considerable venous congestion and considerable cloudy swelling of parenchymatous cells. Some of them in edematous or furthermore hyaline^{ous} degeneration with hyaline-droplets at some places. Slight swelling and degeneration of island-cells.

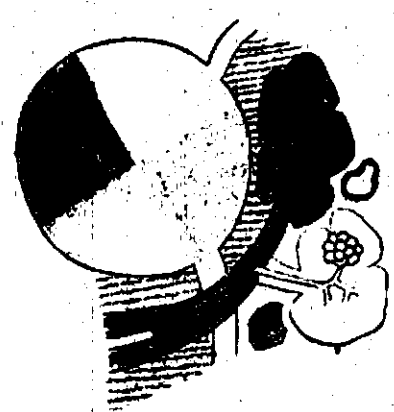
I76.

Considerable venous congestion, edematous swelling of blood-vessel-walls (some of them, hyalineous) and slight hemorrhages in connective tissues.



Considerable degeneration of parenchymatous cells with some hyaline-droplets at some places.

Remarkable stasis of island-capillaries and hyalineous swelling of their walls. Atrophia and degeneration (partially hyalineously) of island-cells and catarrh of efferent ducts.



I78.

Considerable venous congestion and edematous swelling of connective tissues. Considerable cloudy

[REDACTED]

[REDACTED]

[REDACTED]

swelling of parenchym. cells and
catarrh of efferent ducts.

Island-cells, atrophic.

180.

Considerable venous congestion and
edematous swelling of bloodvessel-
walls and perivascular tissues.

Parenchymatous cells in cloudy
swelling and island-cells also in
considerable cloudy swelling and
atrophia or partial hemorrhages in
islands.

190.

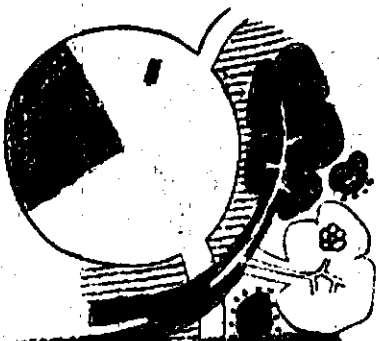
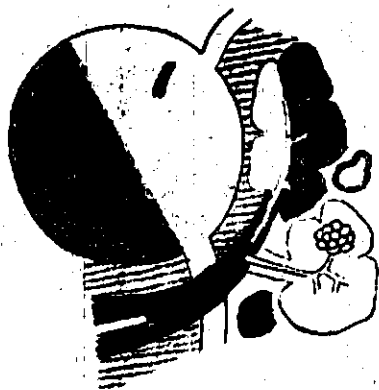
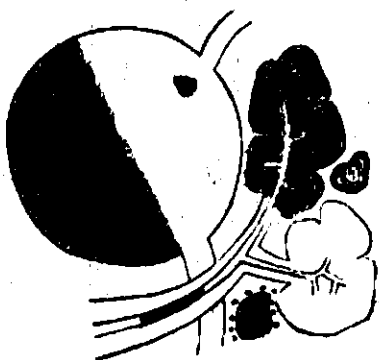
Consid. venous congestion and edema-
tous swelling of connective tissues.

Considerable atrophia and cloudy swe-
lling of parenchymatous cells and
atrophia or cloudy swelling of island-
cells.

Catarrh and polypous hyperplasia of
efferent ducts.

205.

Considerable venous congestion and
edematous swelling of connective
tissues with perivascular accumulation
of lymphocytes at some places.



[REDACTED]

[REDACTED]

Cloudy swelling of parenchymatous cells, esp. in severe degree at pericapillar portions. Edematous swelling and slight degeneration of island-cells.

221.

Considerable venous or capillary congestion, edematous swelling of blood-vessel-walls and perivascular tissues.

Considerable atrophie and cloudy swelling of parenchym. cells.

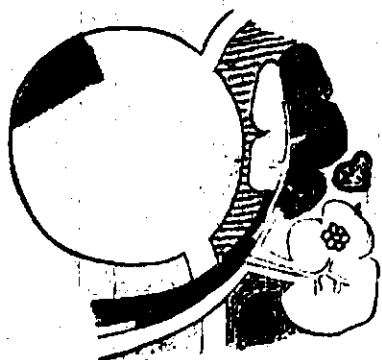
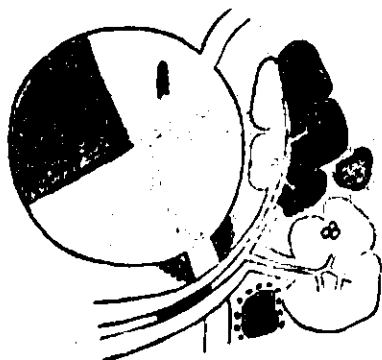
Remarkable stasis of island-capillaries and edematous or bionecrotic swelling at their afferent portions (our so-called "polar edema"). Slight edematous swelling of island-cells.

222.

Considerable venous congestion, edematous swelling and slight hemorrhages in connective tissues.

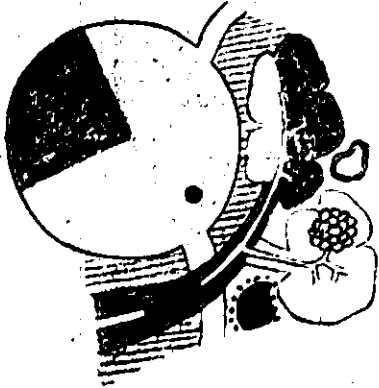
Considerable cloudy and vacuolar degeneration of parenchymatous cells and slight degeneration of island-cells.

[REDACTED]



224.

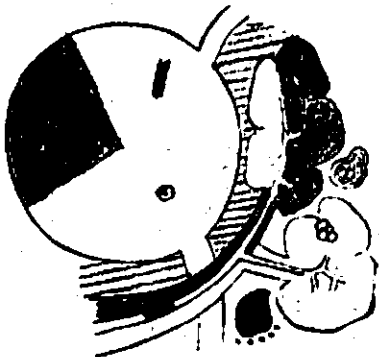
Considerable venous stasis, edematous swelling of connective tissues and dissociation of cell-arrangements. Remarkable atrophia and considerable degeneration of parenchymatous cells and island-cells.



254.

Consid. venous congestion and slight swelling of connective tissues.

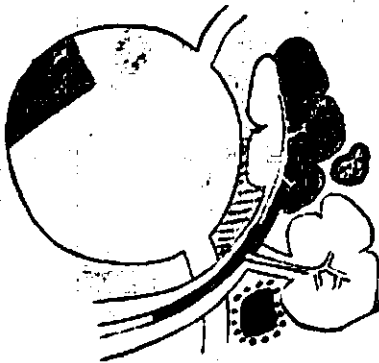
Atrophia and degeneration of parenchymatous cells, esp. at pericapillar portions.



Slight stasis of island-capillaries and remarkable serous exudation in some islands (our so-called "serous apoplexy of islands").

256.

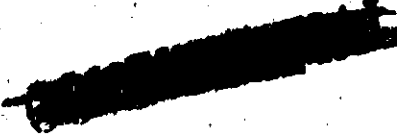
Considerable venous congestion, edematous swelling of connective tissues and slight perivascular round-cell-accumulation at some places. Slight dissociation of cell-arrangements.



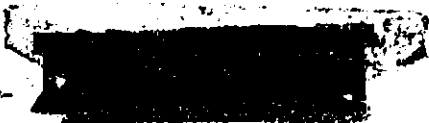
Considerable degeneration of parenchymatous cells, esp. at pericapillar



portions.



Cloudy swelling and furthermore at some places hyalinous degeneration of island-cells.



[REDACTED]

(B) S U M M A R Y

[REDACTED]

SUMMARY, bases on Investigation on
13 Micro-Slices.

A). Acinus.

I) In the most 13 cases, with some-
what congestion of inter- and intra-
acinous capillaries.

Congestion in slight degree.

2 cases.

Congestion in medium degree.

5 cases.

Congestion in severe degree.

6 cases.

Congestion with hyalinous swelling
or degeneration of capillary walls.

3 cases.

Congestion, accompanied with
considerable perivascular edema.

1 cases.

Congestion, accompanied with slight
perivascular hemorrhages.

3 cases.

Congestion, accompanied with
slight perivascular lymphocytes-
accumulations.

10 cases.

Accordingly, the main pathological processes are following:

Congestion ___ Edematous swelling of capillary walls ___

Sometimes, pericapillary edema, hemorrhages and slight round-cell-accumulations.

2) After that, occurred some degenerative changes of parenchymatous cells, esp- at pericapillar portions.

with rather atrophic glandular cells.

2 cases.

with cloudy or edematous swelling of parenchymatous cells.

18 cases.

in slight degree. 10 cases.

in considerable degree. 3 cases.

with hyalinous degene 0 cases.

(with hyaline-droplets) 4 cases.

Accordingly, it shows generally some slight parenchymatous degenerations and sometimes, some remarkable changes with hyalinous degeneration or hyaline-droplets formations in acinus.

[REDACTED]

B). Islands.

I) Sometimes with considerable congestion of island-capillaries. Congestion in considerable degree.

I cases.

Congestion in remarkable degree, accompanied with edematous swelling of capillary walls.

I case.

Congestion, accompanied with remarkable our so-called "polar edema" (remarkable capillary congestion with edema or bionecrotic swelling of pericapillary tissues at afferent portions).

I case.

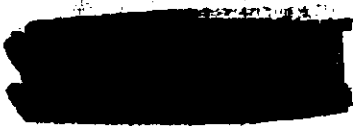
Congestion with our so-called "serous apoplexy of islands". (serous exsudation in islands).

I case.

Congestion with our so-called "(hemorrhagic) apoplexy of islands". (hemorrhages in islands).

I case.

2) Sometimes, some degenerative changes of island-cells.



With rather atrophic cells.

7 cases.

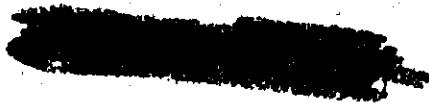
With cloudy swelling.



13 cases.

With slight vacuolar degeneration.

2 cases.



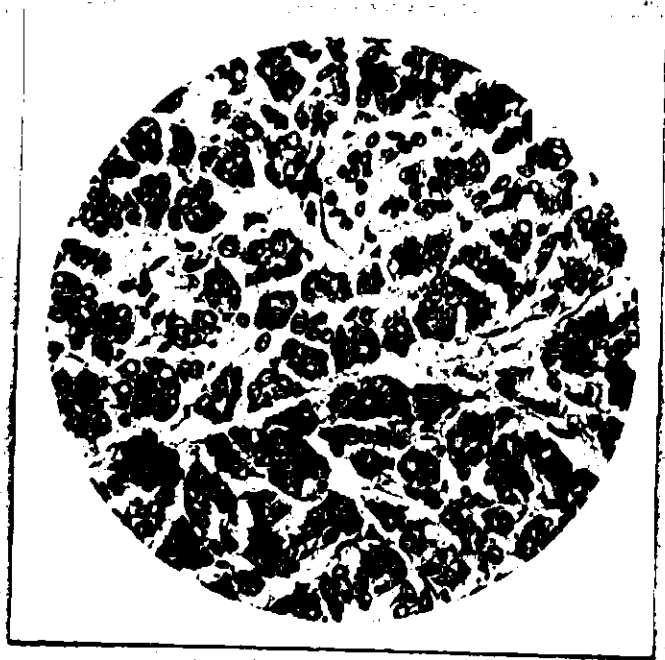
PANCREAS

		85	145	167	176	178	180	180	205	221	222	224	254	256	
Acinus	Size	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Dissociation	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Necrosis	-	-	-	-	-	-	-	-	-	-	-	-	-	
Parenchyma	Parenchymal Cells	Clouding	+	+	+	+	+	+	+	+	+	+	+	+	
		Swelling	+	+	+	+	+	+	+	+	+	+	+	+	
	Zymogen Granules	+	-	+	+	+	+	+	+	+	+	+	+	+	
	Honeycombed Degeneration	-	+	+	+	+	+	+	+	+	+	+	+	+	
	Changes of Nuclei	Swelling	-	-	-	-	-	-	-	-	-	-	-	-	-
		Pyknosis	+	+	+	-	+	+	+	+	+	+	+	+	+
		Karyolysis	-	-	+	-	+	+	+	+	+	+	+	+	+
	Hyperplasia of Centroacinar Cells	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Dsq. of Epithelial cells of Efferent Ducts	-	-	-	-	+	+	+	+	+	+	+	+	+	
	Interstitium	Edema		+	+	+	+	+	+	+	+	+	+	+	+
Contents of Capillaries		Erythrocytes	+	+	+	+	+	+	+	+	+	+	+	+	
		Leucocytes	+	+	+	+	+	+	+	+	+	+	+	+	
		Lymphocytes	+	-	+	+	+	+	+	+	+	+	+	+	
Hemorrhage		-	-	-	-	-	-	-	-	-	-	-	-		
Infiltration		Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	
		Lymphocytes	-	-	-	-	-	-	-	-	-	-	-	-	
Proliferation		Plasma cells	-	-	-	-	-	-	-	-	-	-	-	-	
		Histiocytes	+	-	+	+	+	+	+	+	+	+	+	+	
Capillary wall cells		-	-	-	-	-	-	-	-	-	-	-	-		
Langerhans's Island	Number		+	+	+	+	+	+	+	+	+	+	+		
	Atrophy		-	+	+	+	+	+	+	+	+	+	+	+	
	Necrosis		-	-	-	-	-	-	-	-	-	-	-	-	
	Size	Clouding	+	+	+	+	+	+	+	+	+	+	+	+	
		Swelling	+	+	-	+	+	+	+	-	-	-	-	-	
	Honeycombed Degeneration		+	-	-	+	+	+	+	+	+	+	+	+	
	Changes of Nuclei	Swelling	-	-	-	-	-	-	-	-	-	-	-	-	
		Pyknosis	+	+	+	+	+	+	+	+	+	+	+	+	
		Karyolysis	-	-	+	+	+	+	+	+	+	+	+	+	
	Congestion of Capillaries		+	+	+	+	+	+	+	+	+	+	+	+	
Hemorrhage		+	-	-	-	-	-	-	-	-	-	-	-		
Hyperplasia of Capillary wall cells		+	+	+	+	+	+	+	+	+	+	+	+		

[REDACTED]

**Parenchymatous degeneration
of pancreas 2.**

[REDACTED]



R254

X310

[REDACTED]

[REDACTED]

270

[REDACTED]

**Hyaline droplets degeneration
of parenchymatous cells.**

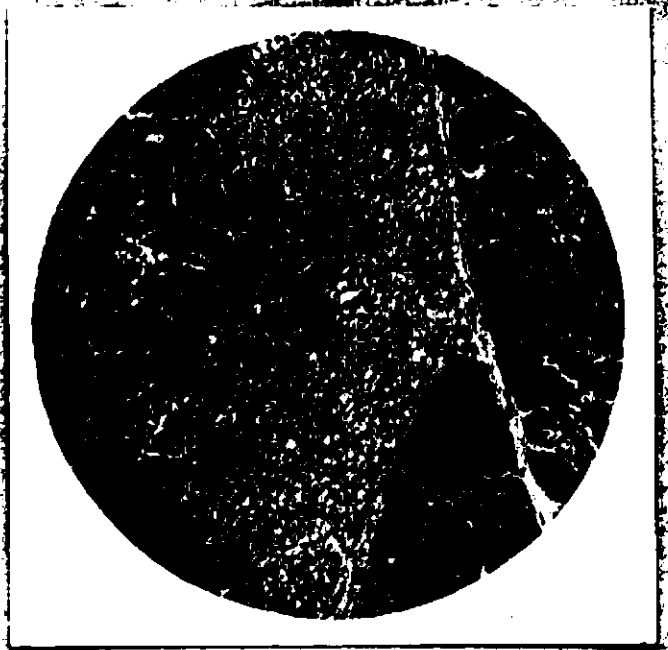
[REDACTED]



R167

x37x

**Vacuolar degeneration of
parenchymatous cells.**



R166

x160

[REDACTED]

[REDACTED] 211

[REDACTED]

Intense parenchymatous degeneration, especially at pericapillary portion.

[REDACTED]



R 205, X330

Intense parenchymatous degeneration, especially at pericapillary portion.



R 222, X270

[REDACTED]

[REDACTED]

272

[REDACTED]

Capillary congestion of island.

[REDACTED]



P 221

X330

Capillary congestion in island, accompanied with slight proliferation of capillary wall cells.



R 222

X350

[REDACTED]

[REDACTED]

273

[REDACTED]

Edematous swelling of
island, accompanied some
parenchymatous degeneration.

[REDACTED]



221

X330

Intense edematous swelling of
island,
Accompanied with vacuolar
degeneration of parenchymatous
cell.



R166

X160

[REDACTED]

274

[REDACTED]

Edema at polar portions of island.

[REDACTED]



R 85

X 33-

Round cell accumulation at polar portion of island.



R 176

X 39-

[REDACTED]

[REDACTED]

275

[REDACTED]

Perivascular round cell
infiltration.

[REDACTED]



R 746 x 160

Perivascular round cell
infiltration in high power.



R 205 x 330

[REDACTED]

[REDACTED]

R 76

[REDACTED]

Hemorrhage in islands.
(so-called apoplexy of island).

[REDACTED]



R 170

x 730

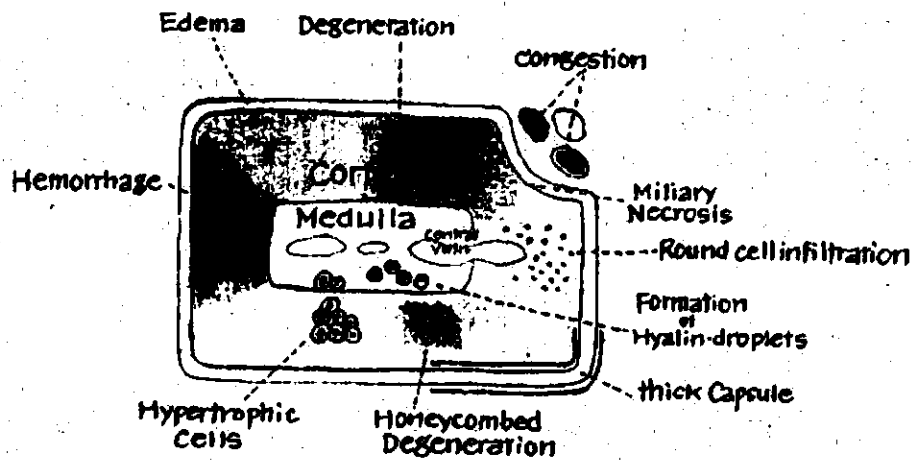
Exudation in island.
(so-called serous apoplexy
of island).



R 254

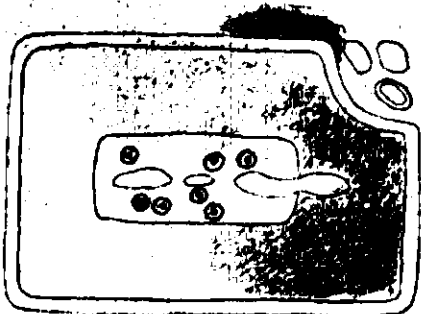
x 710

Suprarenal



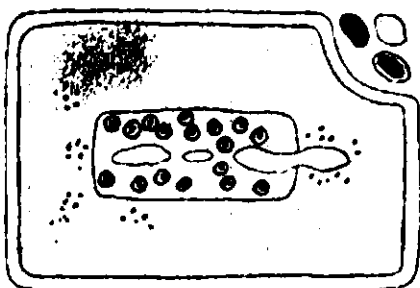
SUPRA-RENAL GLAND.

(A) Microscopical Investigation.



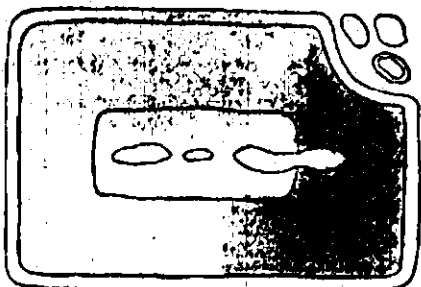
I6.

Considerable atrophgia and degeneration of ~~dege-~~
~~neration~~ of parenchymatous cells. Formation of
acidous lumina in cords of cells of Z. fascicu-
lata. Considerable odema. Perivascular small
round-cell-accumulation in Z. reticularis.



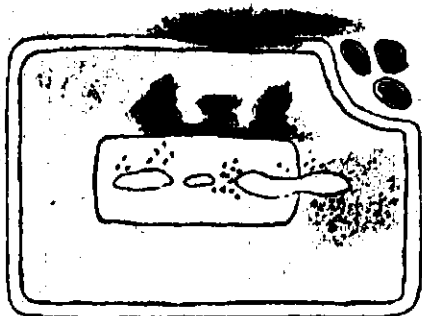
I46.

Perivascular small round-cell-accumulation in
Z. reticularis. Some medullar cells with large
nuclei (initial stage of medullar hypertrophy).
Remarkable formation of hyalin-droplets in medu-
llar cells.



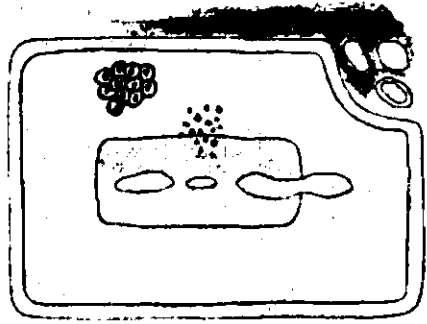
I52.

Considerable atrophgia, degenertion and dissocia-
tion of parenchymatous cells. Some medullar cells
with large nuclei.



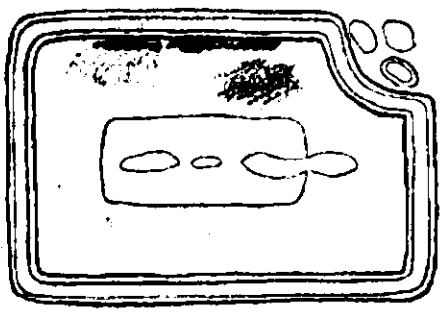
I67.

Considera-ble congestion and hemorrhage in Z.
fasciculata and Z. reticularis. Remarkable ac-
cumulation of round cells (contained many plasma
cells) around subcapsular blood-vessels, central
veins and in medulla.



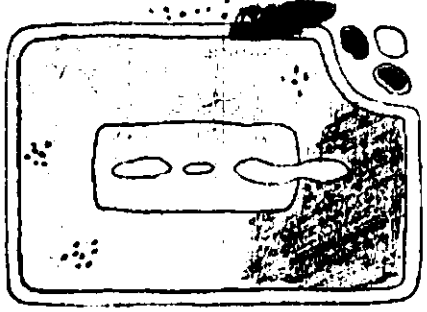
I76.

Increase of fatty contents in cortex (deposits of fats even in Z. glomerulosa). Some districts of cortex with hypertrophic cell-groups. Accumulation of small round cells in Z. reticularis ~~Also in medulla.~~ and in medulla.



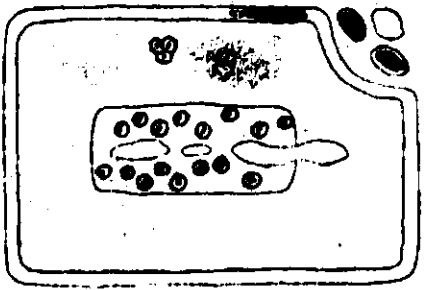
I78.

With very thick capsule. Hemorrhages in Z. glomerulosa. Considerable hyperplasy of capillary-wall-cells.



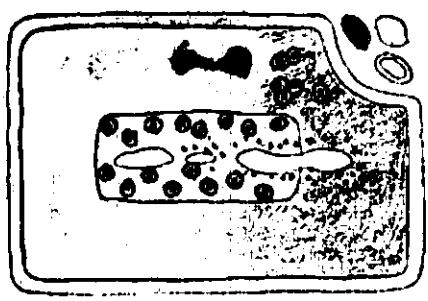
I80.

Dissociation and atrophgia of parenchymatous cells. Considerable edema, Perivascular small round cells accumulation in cortex. Considerable hyperplasia of capillary-wall-cells.



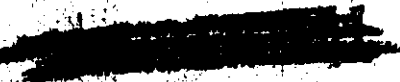
I90.

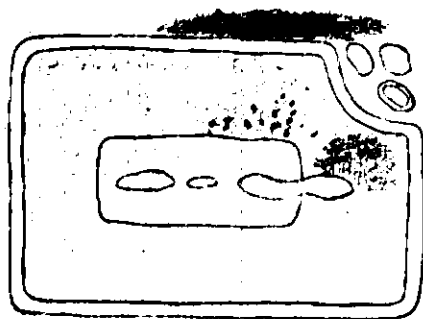
Hemorrhages in Z. reticularis. Some medullar cells with large nucleis. Remarkable formation of hyalin-droplets in medullar cells.



205.

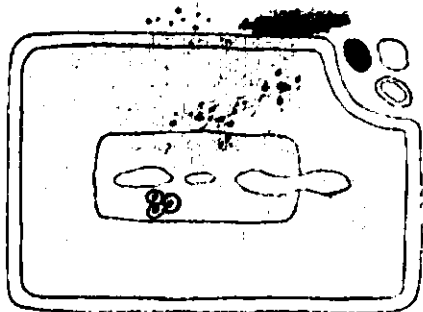
Some hypertrophic cell-groups in cortex. Perivascular found cell accumulation (lymphocytes and plasma cells) in certex and also in medulla. Parenchymatous degeneration with remarkable pyonosis and ~~furthermore Z. fasciculata and Z. reticularis.~~ honeycombed degenerated cells. Considerable congestion and hemorrhages chiefly in Z. fasciculata. Remarkable formation of hyalin-droplets in medullar cells.





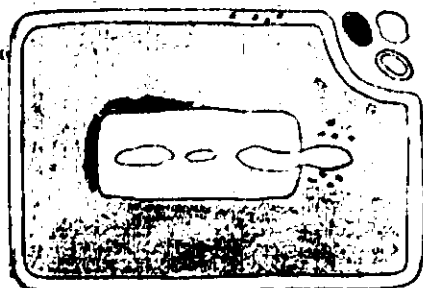
221.

Considerable edema. Perivascular small round-cell-infiltration in Z. fasciculata and Z. reticularis.



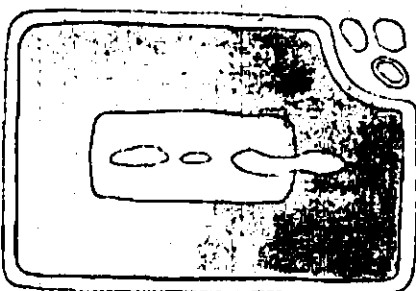
222.

Considerable edema. Perivascular round cell (lymphocytes and plasma cells) accumulation in Z. fasciculata and Z. reticularis. Appearance of some hypertrophic medullar cells.



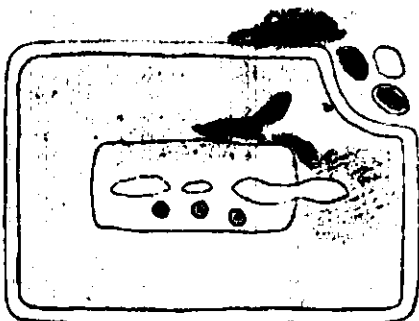
224.

Considerable atrophia, degeneration and dissociation of parenchymatous cells. Slight hemorrhages in Z. reticularis. Perivascular small round-cell-accumulation in cortex. Severe edema.



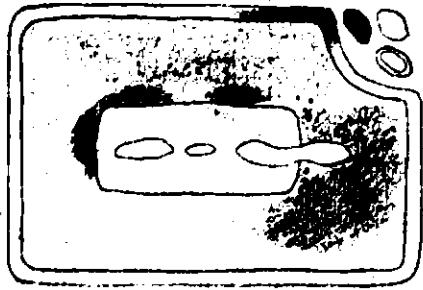
229.

Perivascular small-round-cell-accumulation in Z. fasciculata to form military knots. In these places cortical cells fall into severe degeneration or decayed masses. Considerable hyperplasia of capillary wall-cells.



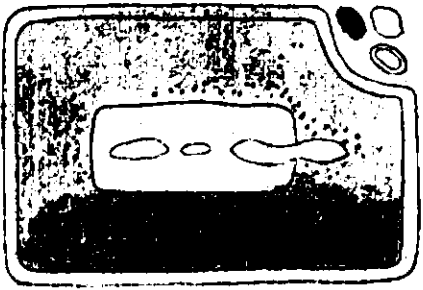
254.

Atrophia of Z. glomerulosa. Localised hemorrhages in Z. reticularis and Z. fasciculata. Considerable edema.



256.

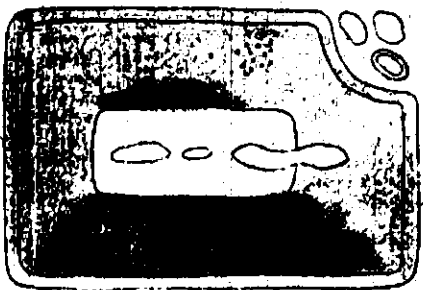
Considerable atrophía of parenchymatous cells. Z. reticularis with more or less remarkable hemorrhages. Considerable edema. Perivascular small-round-cell-accumulation in Z. reticularis. Some hyperplasia of capillary-wall-cells.



727.



Severe dissociation and atrophía of parenchymatous cells. Severe edema. Remarkable perivascular small-round-cell-accumulation at some places in Z. reticularis and around central veins in cortex.



731.

Severe dissociation and atrophía of parenchymatous cells. Severe edema. Some localised hemorrhages in Z. reticularis. Some perivascular small-round-cell-infiltration in Z. fasciculata.



[REDACTED]

(B) SUMMARY.

- [REDACTED]
- a) Pericapsular tissues: slight small-round-cell-infiltration in all cases and considerable hemorrhages in 7 cases.
 - b) Capsular tissues: Generally slight edematous swelling and more or less considerable hemorrhages in 5 cases.
 - c) Cortex: In all cases (except only 1 case with slight increase of fatty contents in cortex) it shows more or less remarkable decrease of fatty contents (splitting of fatty substances and degenerative changes to form dark or homogenous protoplasm).

Severe atrophy in 7 cases and dissociation of cell-arrangements in 5 cases.

Cortex with hypertrophic cell-groups, besides general atrophy in 7 cases.

Generally without vacuolar degeneration, but in 1 case with cellgroups in honeycombed degeneration.

In all cases with severe edematous swelling and in several cases with more or less considerable congestion in Z. reticularis and subcapsular tissues. In all cases (except 1)

[REDACTED]

with a few leucocytes and lymphocytes in capillaries and in 1 case with plenty of them.

[REDACTED]

In 5 cases with slight hyperplasia of capillary wall-cells (endothel cells or adventitial cells). Small-round-cell-infiltration in 12 cases, 3 of them in high degree and 2 of them with plasma cells. We classify parenchymatous disturbances, according to concept "serous inflammation", as following:

Epinephritis serosa I. in 10 cases
II. in 6 cases

- d) Medullar tissues: In all cases with edematous swelling and in 4 cases hyaline-droplets-formation. In all cases with more or less slight vacuolar degeneration. Small-round-cell-infiltration (generally with plasma cells) in 7 cases.

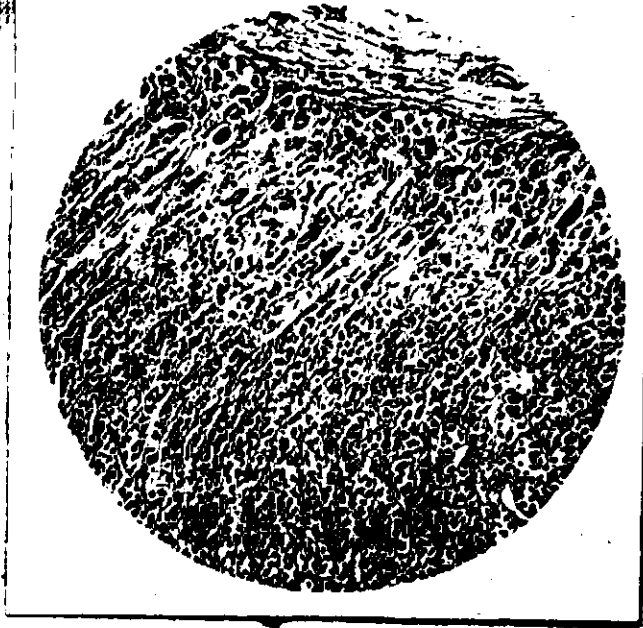
SUPRARENAL

		16	146	152	167	176	189	180	209	208	224	227	228	244	244	256	277	281		
Capsule/Pericapsular Tissue	Serous Inflammation	I	I	II	I	-	I	II	I	I	I	I	II	I	I	II	II	II		
	Congestion	+	#	-	#	÷	÷	÷	+	÷	+	+	÷	÷	+	+	+	÷		
	Hemorrhage	+	-	÷	#	#	-	+	÷	÷	#	+	÷	÷	+	÷	+	÷		
	Infiltration of Leucocytes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Infiltration of Lymphocytes	-	-	÷	÷	÷	÷	+	÷	÷	÷	÷	+	÷	÷	÷	(÷)	÷	÷	
Capsule/Pericapsular Tissue	Proliferation of Histiocytic Cells	÷	+	÷	+	÷	÷	÷	÷	÷	÷	÷	÷	+	+	÷	÷	+		
	Edema	+	÷	#	+	#	÷	+	÷	(#)	+	#	÷	+	+	÷	#	#		
	Hemorrhage	-	÷	÷	+	+	-	(#)	+	÷	÷	÷	÷	÷	÷	+	÷	÷		
	Cellular Infiltration	÷	-	÷	÷	÷	-	÷	+	÷	÷	÷	(#)	÷	÷	÷	÷	÷		
	Decrease of Fat	#	#	+	#	-	#	#	#	#	+	+	#	#	#	#	#	#		
Parenchyma of Cortex	Cortical Cells	Dissociation	-	-	(#)	÷	-	-	(#)	(÷)	+	÷	÷	#	÷	÷	+	#	#	
		Atrophy	#	÷	(#)	÷	÷	÷	(#)	÷	+	+	-	#	+	+	#	#	#	
		Hypertrophy	÷	÷	-	-	÷	-	÷	÷	+	÷	÷	-	-	-	-	-	-	
		Splitting of Lipid-drops	#	#	#	#	÷	#	#	#	#	#	+	#	#	#	#	#	#	
		Vacuolar Degenerat. (Dietrich)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Honeycomb Degener. (Dietrich)	-	-	-	-	-	-	-	-	(+)	-	-	-	-	-	-	-	-	
		Formation of Lumina	+	-	+	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	
		Brown Pigment	÷	#	#	÷	#	÷	+	#	+	+	+	+	÷	÷	+	+	+	
		Changes of Nuclei	Pyknosis	+	-	÷	+	÷	÷	÷	÷	#	÷	÷	÷	÷	÷	÷	÷	÷
			Karyolysis	#	÷	#	÷	+	÷	÷	÷	+	÷	÷	÷	+	+	+	#	+
Disappearance	+		÷	#	÷	+	÷	÷	(÷)	+	÷	÷	÷	÷	÷	÷	÷	÷		
Parenchyma of Cortex	Interstitialium of Cortex	Congestion of Subcapsular Bloodv.	#	#	÷	÷	#	#	÷	#	+	#	#	+	+	#	#	#		
		Edema	#	÷	#	+	÷	+	#	(+)	(+)	#	#	(#)	#	#	#	#		
		Contents of Capillaries	Erythrocytes	(#)	#	+	#	+	(+)	÷	#	#	#	#	÷	(+)	#	÷	÷	
			Leucocytes	÷	-	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	
			Lymphocytes	+	÷	-	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	
Large Mononuclears	-		-	-	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷			
Hemorrhage	÷	÷	÷	#	÷	+	+	+	÷	÷	÷	÷	÷	÷	÷	÷				
Parenchyma	Circumscribed Round cell Infiltration	÷	+	÷	#	÷	#	÷	#	+	#	#	÷	÷	÷	#	#			
	Hyperplasia of Vessel wall Cells	-	÷	-	÷	÷	+	+	÷	÷	÷	÷	÷	÷	÷	÷	÷			
Medulla	Parenchyma	Hyalindrops	#	#	÷	÷	-	(+)	#	#	÷	-	÷	÷	÷	÷	÷			
		Vacuolar Degenerat	#	+	(+)	#	+	÷	÷	#	÷	+	÷	÷	÷	÷	÷			
	Edema	+	÷	#	+	#	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷			
	Congestion	÷	+	÷	÷	÷	(+)	+	÷	÷	÷	÷	÷	÷	÷	÷	÷			
	Hemorrhage	÷	÷	÷	÷	÷	(+)	÷	÷	÷	÷	÷	÷	÷	÷	÷	÷			
Circumscribed Round cell Infiltration	÷	÷	÷	#	#	÷	+	+	#	÷	÷	÷	÷	÷	÷	÷				

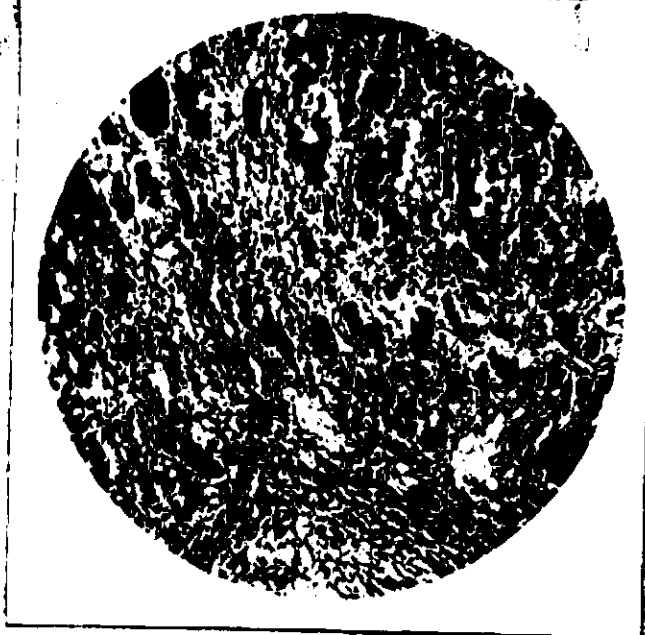
[REDACTED]

Epinephritis serosa III, in low power.

[REDACTED]



Epinephritis serosa, with remarkable congestion and edematous swelling of cortical tissues.



[REDACTED]

Honeycombed degeneration of cortical tissues.

[REDACTED]



Miliary necrosis in cortical tissues.



[REDACTED]

[REDACTED]

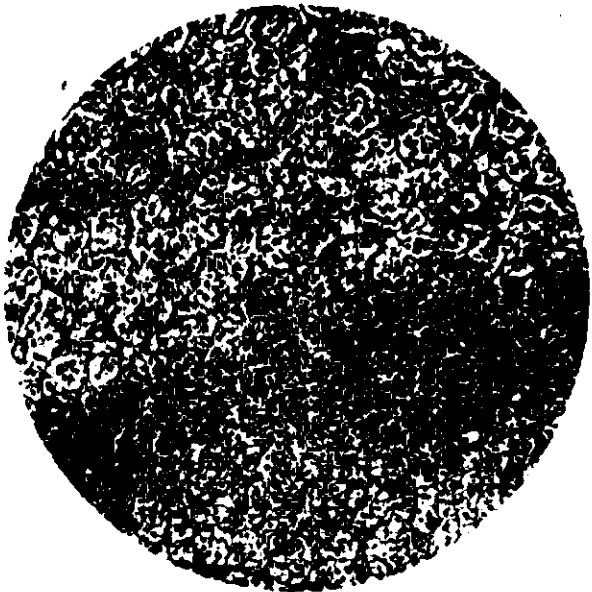
[REDACTED]

Small round cell accumulation around the central vein.

[REDACTED]



Round cell accumulation in medullary tissues.



[REDACTED]

[REDACTED]

[REDACTED]

Hyaline droplets degeneration of medullary cells.

[REDACTED]

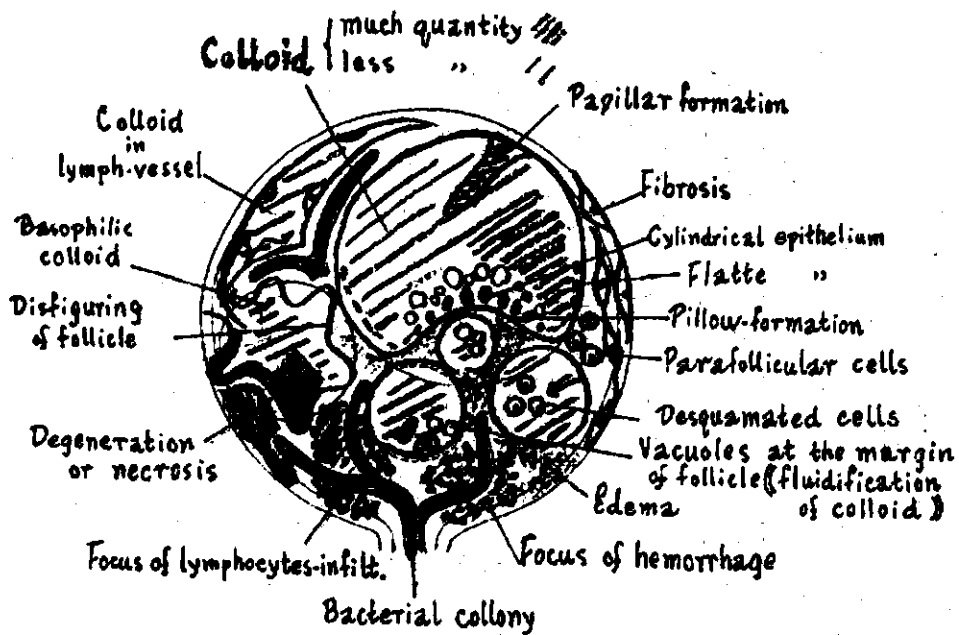


[REDACTED]

[REDACTED]

[REDACTED]

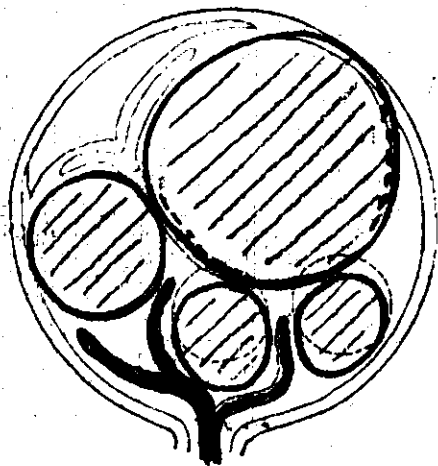
Thyroid





THYROID.

(A) ~~Microscopical Investigation.~~



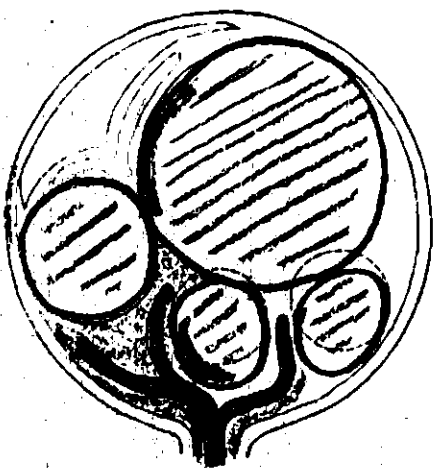
16.

Slight congestion and follicles in statical state.

50.

Slight congestion, slight edema in interstitial tissues and slight degeneration of follicular epithelial cells.

At some places with pillow-like or papillar increase of epithelial cells and many microfollicles-formation in the attachment-area.



85.

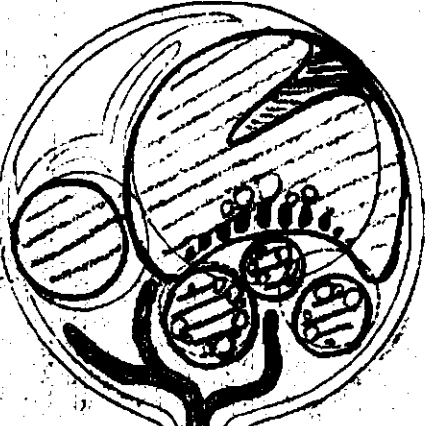
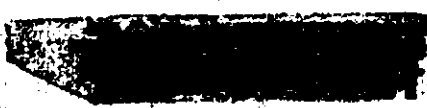
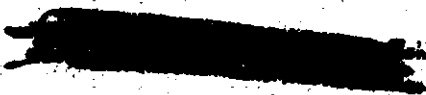
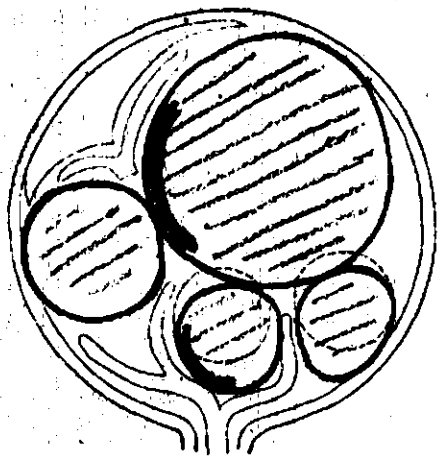
Slight degenerative changes of follicular epithelial cells (degeneration and desquamation).

167.

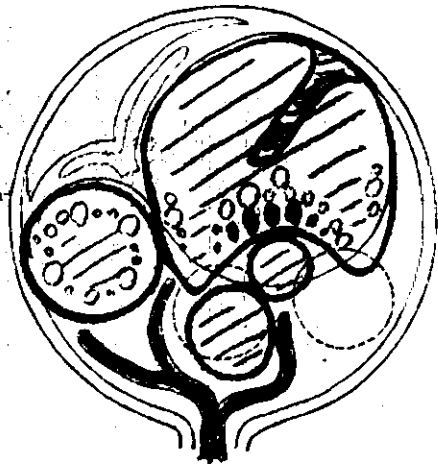
Struma colloides proliferativa.

Slight congestion and some macrofollicles with papillar or pillow-like increase of epithelial cells and many microfollicles-formation in the area attached to these proliferative follicles.

A large quantity of colloidal masses in follicles.



[REDACTED]



I79.

Slight congestion without any degenerative changes. [REDACTED]

Slight hyperplasia of follicular epithelial cells to form pillow-like or papillar arrangement. Vacuole-formation in colloidal masses at the margin of follicles (increase of resorption).



I78.

Collapse of follicles.

Rather anaemic edematous swelling of interstitium and remarkable degenerative changes of epithelial cells (flattening, cloudy swelling, pycnosis, desquamation and desolation), without any proliferative tendency: namely follicles in collapse.

Increase of colloidal masses in follicles and also in lymph-vessels.

I80.

Chronic thyreoiditis.

Considerable congestion, edematous swelling and hyaline degeneration of interstitial tissues with some round cell infiltrations.



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

So many micro-follicles all over the thyroidal tissues with remarkable degeneration of epithelial cells (flattening, cloudy swelling, pyknosis, desquamation and desolation of epithelial cells, especially desquamation and desolation in high degree).

In follicles: a large quantity of desquamative epithelial cells and remarkable decrease of colloidal masses and at some places, basophilic masses.

At some places, localised slight hemorrhages in follicles.

190.

Slight swelling of interstitial tissues and follicles in statical state (with slight hyperplasia) and many micro-follicles.

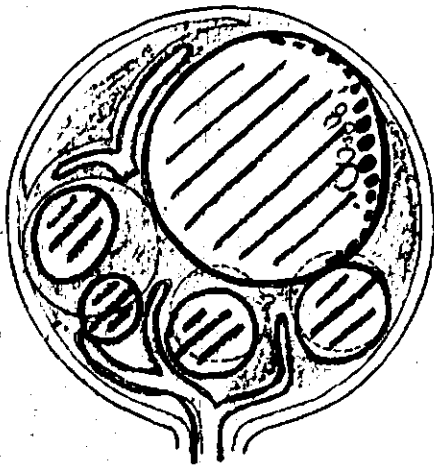
No remarkable degenerative changes.

193.

Thyroid in collapse.

Considerable congestion and edematous swelling of interstitial tissues with follicles in collapse-state with remarkable degenerative changes (flattening, cloudy swelling, desquamation and desolation in a high degree). In follicles, increase of more or less basophilic or fluidified colloidal masses.

[REDACTED]



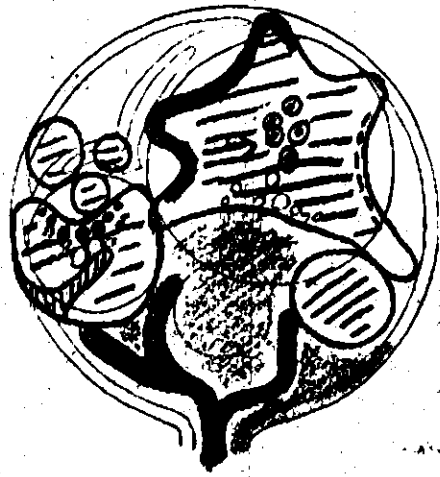
[REDACTED]

Also in lymph-vessels, some colloidal accumulations.

[REDACTED]

207.

Follicular collapse with some slight regenerative processes.



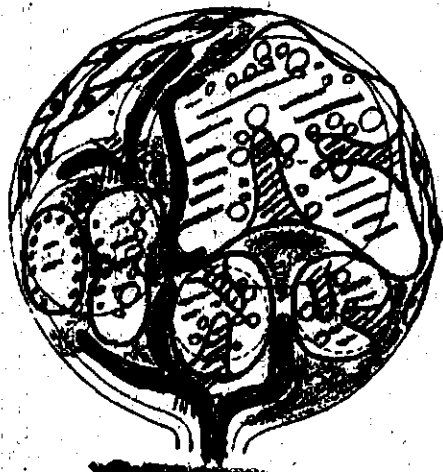
Considerable congestion and edematous swelling of interstitial tissues with follicles in subacute stage with some degenerative changes at some places and some regenerative changes at the other places.

As degenerative changes: flattening, cloudy swelling, pycnosis, desquamation and desolation of follicular epithelial cells. And increase of more or less basophilic or fluidified colloidal masses in follicles: namely follicular collapse.

As regenerative changes, slight hyperplasia of epithelial cells to form pillow-like or papillar arrangements.

221.

(a). Subacute disfiguring in Graves's thyreoid. Slight fibrosis, slight edematous swelling of interstitial tissues and some significant changes of precapillar arterioles (Increase of endothelial cells, swelling of intima, edematous,



[REDACTED]

[REDACTED]

[REDACTED]

swelling of adventitial tissues, thickening of media and leaf-knots formation at bifurcating portions of arterioles).

[REDACTED]

Parenchymatous follicles are in the hyperfunctional state with many micro- and macrofollicles or in the knotty hyperplasia.

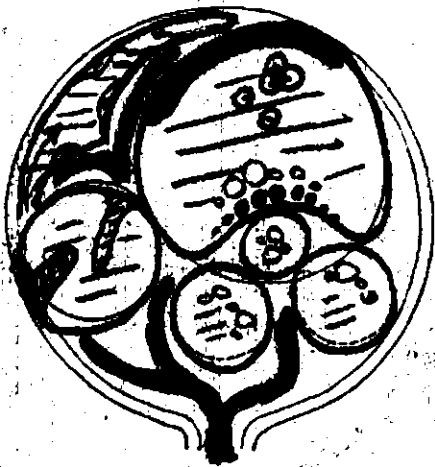
Macrofollicles with papillary increased epithelial cells and microfollicles with papillary, or trabecularly increased epithelial cells and with so many parafollicular cells.

Beside these hyperfunctional changes exist some degenerative processes of epithelial cells (flattening, pycnosis, desquamation, and desolation of epithelial cells).

221.

(b). Considerable congestion and some macrofollicles with papillary or pillow-like increased epithelial cells and so many micro-follicles in the attachment areas of these proliferative follicles.

Considerable degenerative changes of these follicular epithelial cells (flattening, pycnosis, desquamation and desolation of epithelial cells) and slight increase of colloidal masses in follicles and lymphvessels.



[REDACTED]

At some places, some follicles with somewhat regenerative changes (papillar arrangements of epithelial cells).

224.

[REDACTED]

Considerable congestion and slight edematous swelling of interstitial tissues with some degenerative changes of epithelial cells (desquamation and desolation).

Considerable increase of colloidal masses in follicles (decrease of resorption) and in lymph-vessels.

256.

Slight congestion and no remarkable changes else. With some macro- and many microfollicles.

727.

Subacute disfiguring of thyreoid.

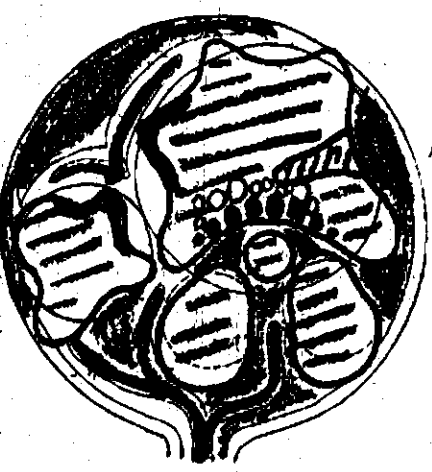
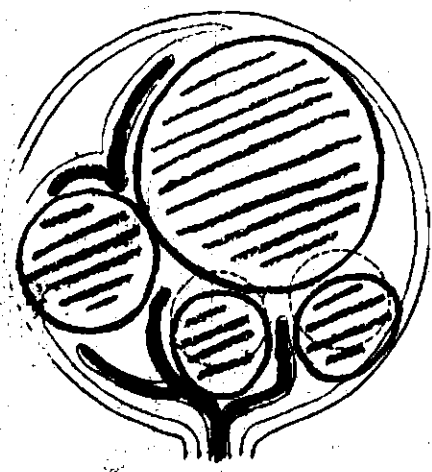
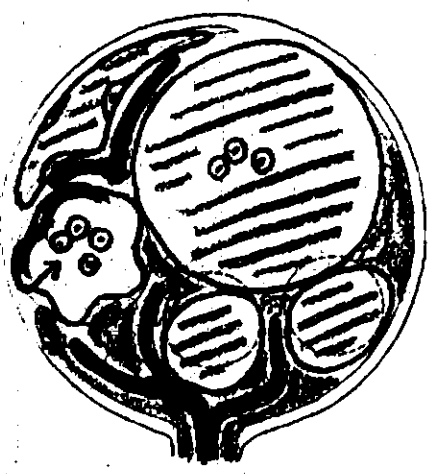
Slight congestion, edematous swelling and hyaline degeneration of interstitial tissues.

Follicular epithelial cells are at some places more or less degenerative and at the other places, somewhat regenerative.

As degenerative changes: cloudy swelling, pyconosis, desquamation and desolation of epithelial cells and as regenerative changes; papillar or pillow-like increase of epithel cells.

[REDACTED]

[REDACTED]



[REDACTED]

73I.

These thyreoid are in confusion with so many micro-macro or cytic follicles and various reactive changes. [REDACTED]

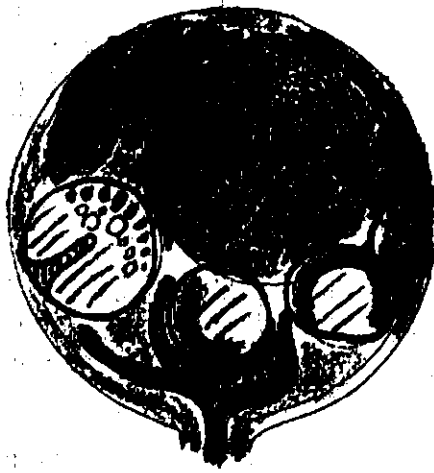
Micro- and macro- follicles with remarkable degenerative changes:

a) considerable congestion, edematous swelling, more or less remarkable hemorrhages and diffuse lymphocytes-infiltration of interstitial tissues and b) remarkable degenerative changes of epithelial cells (flattening, pycnosis, desquamation and desolation of epithelial cells) with slight proliferative tendency (papillar arrangements of epithelial cells).

At some portions exist multiple caseous structureless, miliary places, due to glanders-infection with severe exsudative perifocal changes.

In the focal parts, totally caseous and structureless and in perifocal parts, remarkable hemorrhages and considerable increase of phagoepithelial cells (erythrocytes- and decayed masses- phagocytosis).

In the neighbouring tissues, slight hyperplasia of follicular epithelial cells to form new follicles. [REDACTED]



[REDACTED] 297

(B) SUMMARY.

1) The bird-eye-views of pathological changes in all cases.

-
16. Statical state.
50. Slight activated state, degenerative form. Slight congestion and edema
Slight degeneration
85. Slight activated state, degenerative form. Slight degeneration
167. Struma colloidis proliferativa.
176. Slight activated state, regenerative form. Slight congestion
Slight hyperplasia of epithelial cells.
178. Follicular collapse.
180. Chronic Thyreoiditis. Considerable congestion
Some round cell-accumulation
Some hemorrhages.
Some degeneration of epithelial cells.
190. Statical state.
193. Follicular collapse.
207. Follicular collapse.
221. Subacute disfiguring of Graves's thyroid. Hyperfunctional findings,
as Graves's disease.
Disfiguring-findings, due to Glanders-infection.
224. Slight activated state, degenerative form. Slight congestion, edema.
Slight degeneration of epithelial cells.

[REDACTED]

256. Statical state.

727. Subacute disfiguring.

Slight congestion.
Hyaline degeneration of
interstitial tissues.
Considerable degeneration.

[REDACTED]

731. Subacute Thyreoiditis with
multiple glanders-knots.

[REDACTED]

Therefore, the frequency of pathological changes:

[REDACTED]

- 1) Statical state. 3 cases.
Struma colloides proliferativa. 1 case.
- 2) Slight activated state.
 in regenerative form. 1 case.
 in degenerative form. 3 cases.
- 3) Follicular collapse. 3 cases.
- 4) State of acute disfiguring. 0 case.
 State of subacute disfiguring. 2 cases.
- 5) Slight thyreoiditis. 1 case.
 Subacute Thyreoiditis.
 with multiple glanders-knots. 1 case.

6) All microscopically investigated 15 cases.

Because of chronic processes of glanders-disease, sometimes thyroids are not so activated or sometimes slightly activated. Instead of acute severe disfiguring, occurred sometimes subacute or rather chronic disfiguring, which advanced occasionally furthermore to chronic inflammation of thyroids and one of them had multiple glanders-knots, as a rare occurrence. In multiple abscesses played follicular epithelial cells as so-called "phago-epithelium" the main role, so as mentioned in the section of microscopical investigations.

[REDACTED]

2) The developing mechanism of pathological, changes due to glanders-infection are as following:

Statical state.

[REDACTED]
No remarkable changes

Activated, slightly

- . in regenerative form
- . in degenerative form

State of follicular collapse.

Follicular collapse

- . with acute disfiguring
- . with subacute disfiguring

Thyreoiditis

State of subacute or chronic inflammation.

- . with some cell accumulations
- . with abscesses formations

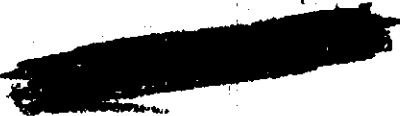
x) cf. Chapter of "Thyreoids of Anthra-disease".

THYROID

		16	50	85	167	176	178	180	190	193	207	221	224	229	256	727	731	
Parenchyma	Follicles	Large Follicles	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	
		Small Follicles	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		Cysts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Epithelium	Microfollicles	-	+	+	(+)	+	+	+	+	+	+	+	+	+	+	+	+
		Ruin	-	-	+	-	-	+	+	+	+	+	+	+	+	+	+	+
		flat	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		cuboidal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		Cylindrical	-	+	(+)	(+)	(+)	-	-	-	-	+	+	+	+	(+)	+	(+)
		Papilla Formation	-	+	+	+	+	+	-	+	-	-	(+)	(+)	+	+	+	+
		Pillow Formation	-	+	+	(+)	(+)	+	-	+	-	-	(+)	(+)	(+)	(+)	+	+
		Solid Cell Groups	-	+	(+)	+	+	+	+	+	-	-	(+)	(+)	(+)	(+)	+	+
		Trabecular Arrangement	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+
		Sack Formation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		Desquamation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Changes of Nuclei	Dyknois etc.	+	+	+	(+)	+	+	+	+	+	+	+	+	+	+	+
	Increase of Chromatin		+	+	+	(+)	+	+	+	+	+	+	+	+	+	+	+	+
	Karyolysis & rhexis		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Colloid	Quantity	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Vacuoles		+	-	-	+	(+)	+	-	-	-	+	+	-	-	+	+	+	
Fluidification		-	-	-	-	-	+	+	+	+	+	+	-	-	-	+	+	
Stroma	Edema	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Hyaline Degeneration	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Fibrosis	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Colloid in Lymph-vessels	(+)	(+)	+	(+)	(+)	+	+	(+)	+	+	+	+	+	(+)	+	(+)	
	Hemorrhage	+	-	+	(+)	+	+	+	(+)	+	+	+	+	+	+	+	(+)	
	Round Cell Infiltration	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Blood Vessels Contents	Congestion	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		Lymphocytes	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		Leucocytes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		Fibrin	-	-	-	-	-	-	+	-	-	-	-	-	-	-	+	(+)
		Increase of Endothelium	(+)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Lymphoid Focus	Deseneration of Endothelium	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Swelling of Walls		(+)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymphocytes		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lymphoid Focus	Plasma Cells	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Germinating Center	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



R-256 Atrophy of lobulus.
x40



R-180 Intense atrophy of lobulus.
x60



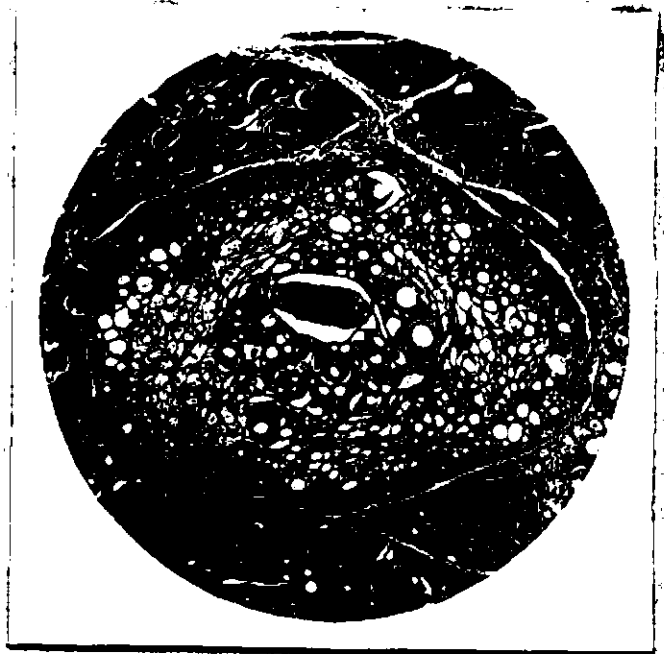
R-22 Intense atrophy or ruins of
follicles.

x 21.8



R-85 Activation of follicular
epitheliums, as so-called
phago-epitheliums.

x 140



~~_____~~
R-158 Follicular collapse, with
intense edema and some
colloidal masses in lymphatic
lymphsinusoid.

x90



R-190 Follicular collapse, with
desquamation of follicular
epitheliums.

x130



[REDACTED]

R-167 Active follicles.

x80

[REDACTED]



R-176 Active follicles: with some pillow-like hyperplasia of follicular epitheliums to form micro-follicles.

x120

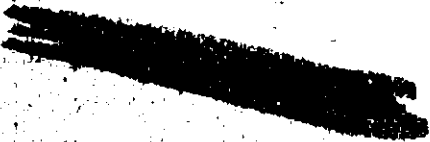
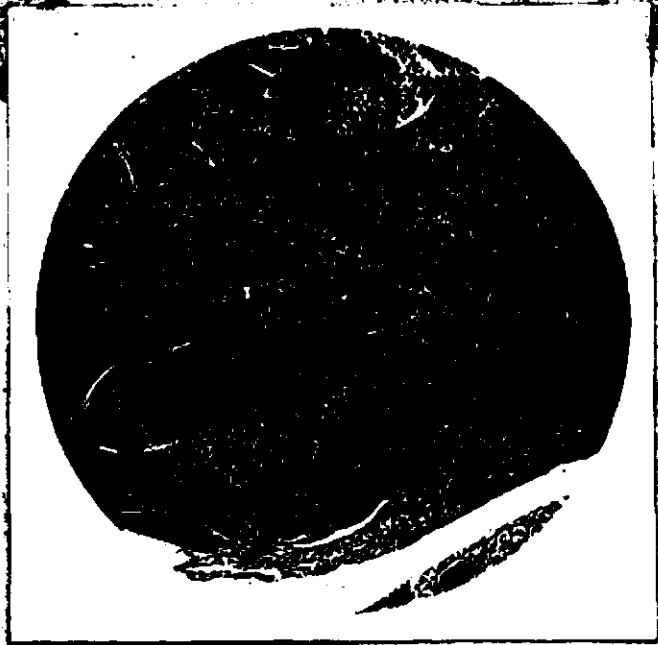
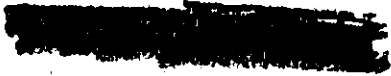




R-73) Thyreoiditis acuta, with multiple
glanders-knots.

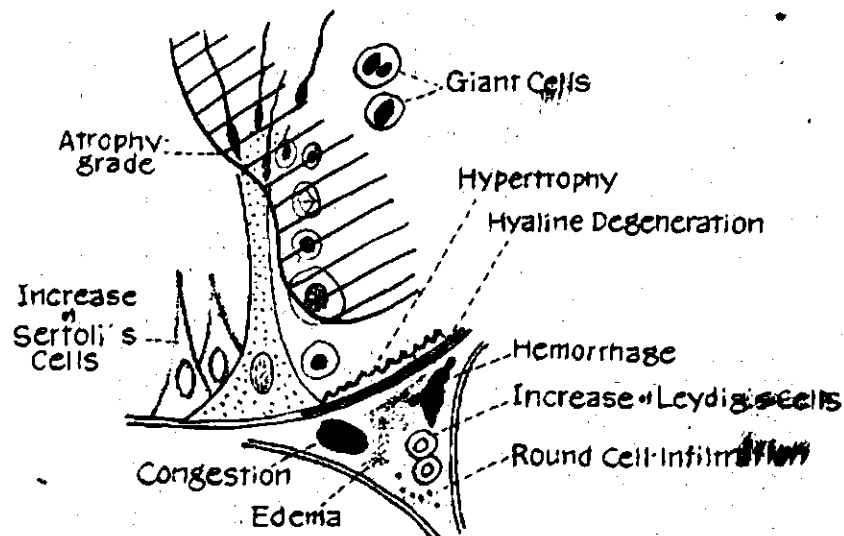
~~#32.8~~

x30



307

Testis





TESTICLE

A) Microscopical Investigation

a) Parenchyma

Reduction of Tubulus Atrophy testis



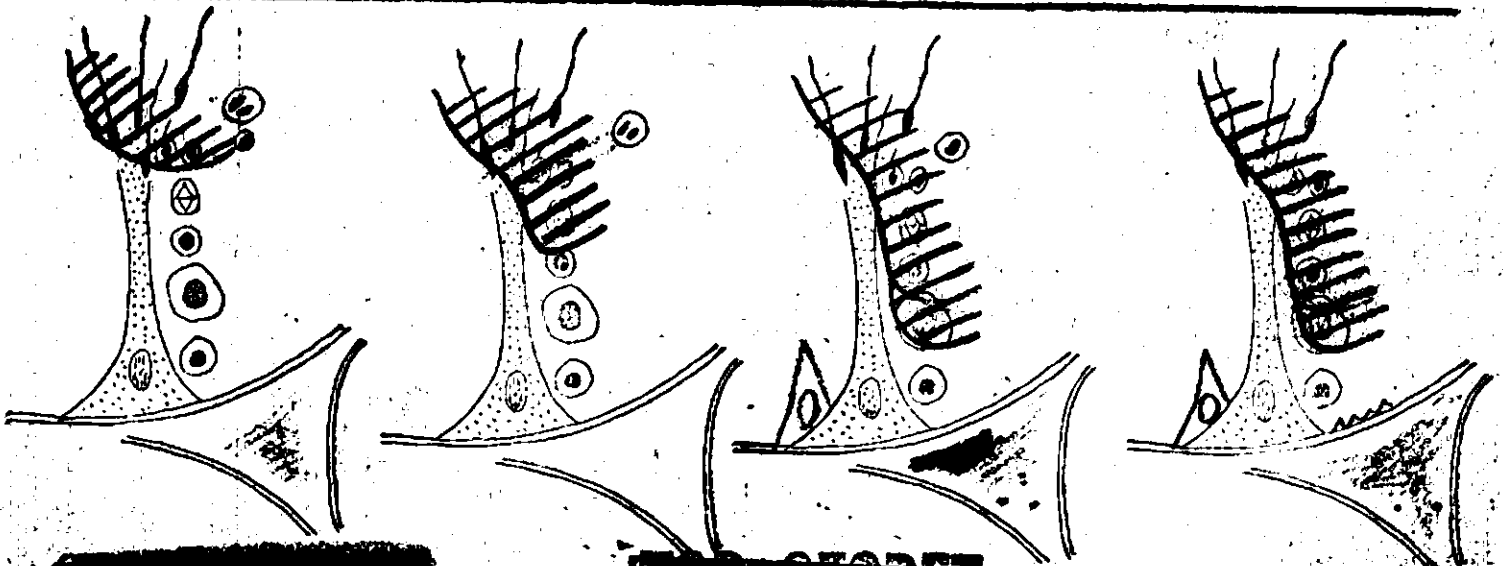
Hypertrophia or Hyaline degeneration of T. propria Formation of Giant cells Hyperplasia of Sertoli's cells

146	I	I	-	+	Z
152	~I	II	-	+	Z
167	II	III	+	+	+
176	I	III	+	-	+

b) Stroma

Congestion Hemorrhages Round cell infiltration Swelling or Roughness Increase of Leydig's cells

146	-	-	-	+	Z
152	-	-	-	+	Z
167	+	+	+	+	+
176	-	-	+	+	Z



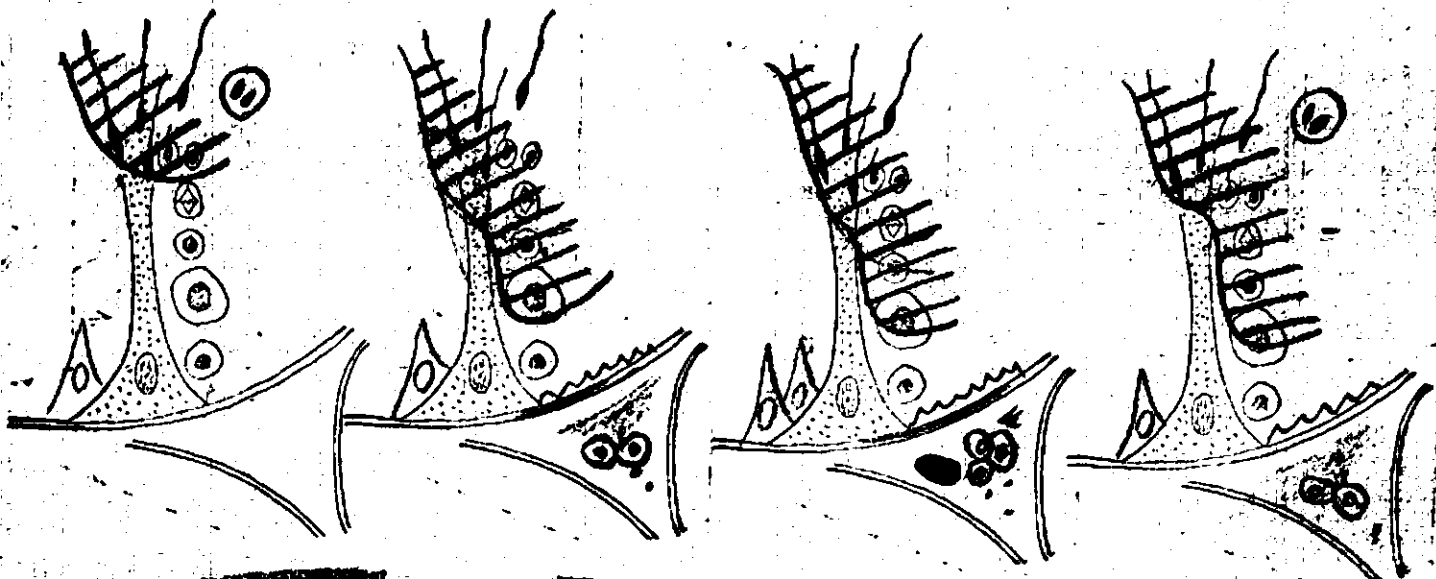


a) Parenchyma.

	Reduction of Tubulus	Atrophy testis		Hypertrophy or Hyaline dege- neration of I. propria.	Formation of Giant cells	Hyperplasia of Sertoli's cells
190	I.	II.	-	-	-	-
193	II.	III.	+	+	+	+
205	II.	III.	+	+	+	+
207	I.	III.	+	+	+	+

b) Stroma.

	Congestion	Hemorrhages	Round cell infiltration	Swelling or Roughness	Increase of Leydig's cells.
190	-	-	-	-	-
193	+	+	+	+	+
205	+	+	+	+	+
207	+	-	+	+	+



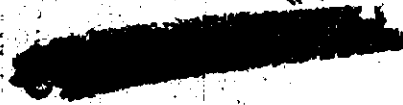
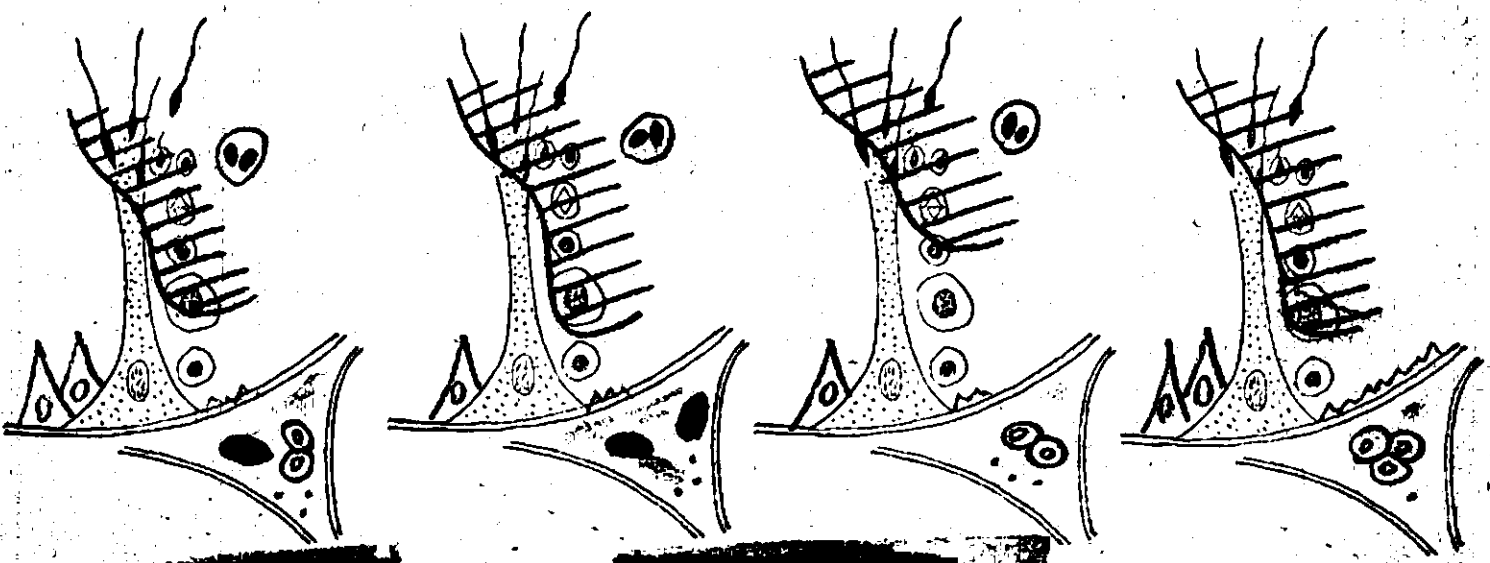


a) Parenchyma

	Reduction of Tubulus	Atrophia testis	Hypertrophia or Hyaline degeneration of T. propria	Formation of Giant cells	Hyperplasia of Sertoli's cells
221	I.	III.	+	+	+
222	I.	III.	+	+	+
224	I.	II.	+	+	+
229	II.	III.	+	-	+

b) Stroma

	Congestion	Hemorrhages	Round cell infiltration	Swelling or Roughness	Increase of Leydig's cells.
221	+	-	+	+	+
222	+	-	+	+	2
224	+	-	+	+	+
229	+	-	+	+	+





a) Parenchyma

Reduction of tubulus Atrophia testis



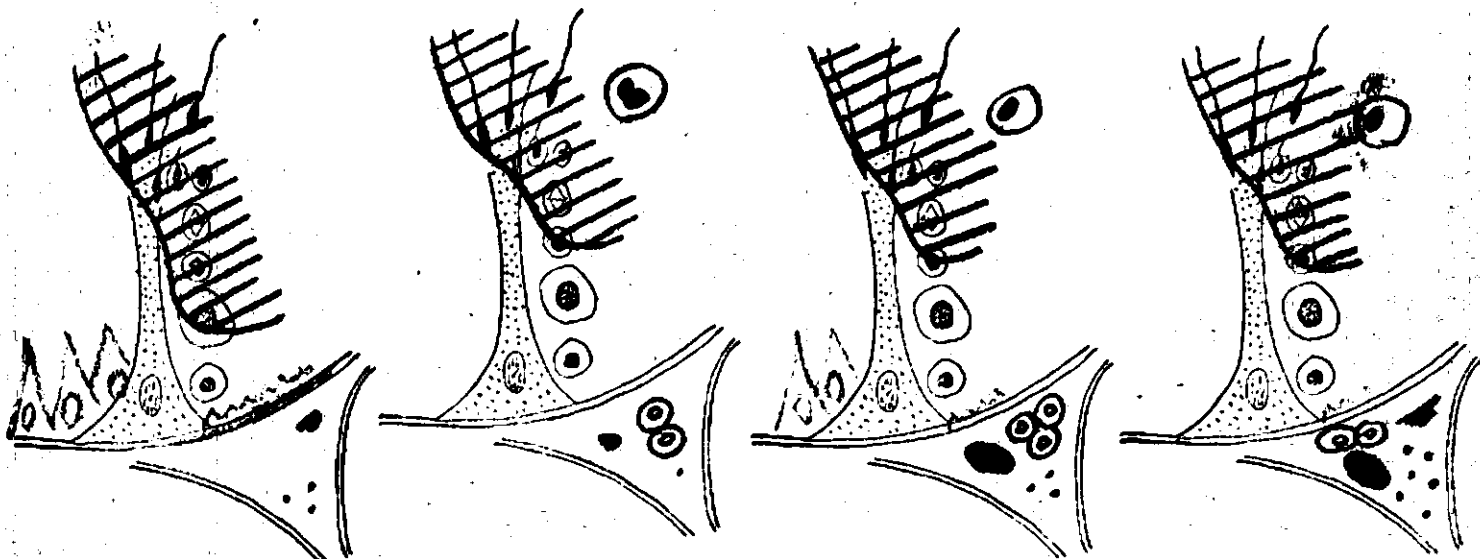
Hypertrophia or Hyaline degeneration of T. propria Formation of Giant cells Hyperplasia of Sertoli's cells

254	II.	III.	+	-	#
256	-	II	-	+	Z
727	~I.	II	+	+	+
731	I.	II.	+	+	Z

b) Stroma.

Congestion Hemorrhages Round cell infiltration Swelling or Roughness Increase of Leydig's cells

254	+	+	+	+	Z
256	+	-	+	+	+
727	+	-	+	-	#
731	+	+	+	-	+



[REDACTED]

(B) S U M M A R Y

(1)

Our classification of "disturbance of spermatopoietic process".

a) On the "Atrophia testis".

Atrophia testis I. ~~Pyknotic spermatozoa.~~
Pyknotic spermatozoa.

Relative increase of prespermatids and spermatids.

Atrophia testis II. Degeneration of prespermatids and spermatids with somewhat considerable excretion or sometimes giant cell-formation (as signs of degeneration).

Atrophia testis III. Remarkable degeneration of prespermatids and spermatids.

Atrophia testis IV. Remarkable degeneration or sometimes complete diminishment of spermatocytes.
Degeneration and sometimes irregular cell-arrangement of spermatogonien.

Atrophia testis V. Complete diminishment of spermatid cells.
Remarkable swelling and hyaline degeneration of T. propria of tubuli seminiferi.

b) On the reduction of tubuli seminiferi.

Reduction I. Diameter of tubulus seminiferus is reduced to $\frac{2}{3}$ of normal. (slight atrophie).

Reduction II. Reduced to $\frac{1}{2}$. (medium atrophie).

Reduction III. Reduced to $\frac{1}{3}$. (severe atrophie).

[REDACTED]

(2)

Generally infection causes some disturbances of spermatogenic process:

[REDACTED]

Atrophia testis	I.	1 case.
"	II.	6 cases.
"	III.	9 cases.

Reduction of tubuli seminiferi

	I.	10 cases.
"	II.	5 cases.

Sometimes accompanied with giant cell-formation of spermatids and prespermatids, as degenerative signs.

11 cases.

Generally infection causes some congestion.

Congestion. in slight degree. 3 cases,

Sometimes hemorrhages and edema in interstitial tissues.

Hemorrhages in slight degree. 3 cases.

Edema in slight degree. 10 cases.

" in medium degree 5 cases.

Accompanied with sometimes some round cell-infiltration.

in slight degree. 12 cases.

in medium degree. 1 case.

Leydig's cells. Sometimes increase.

in slight degree. 8 cases.

in medium degree. 3 cases.

in normal state. 5 cases.

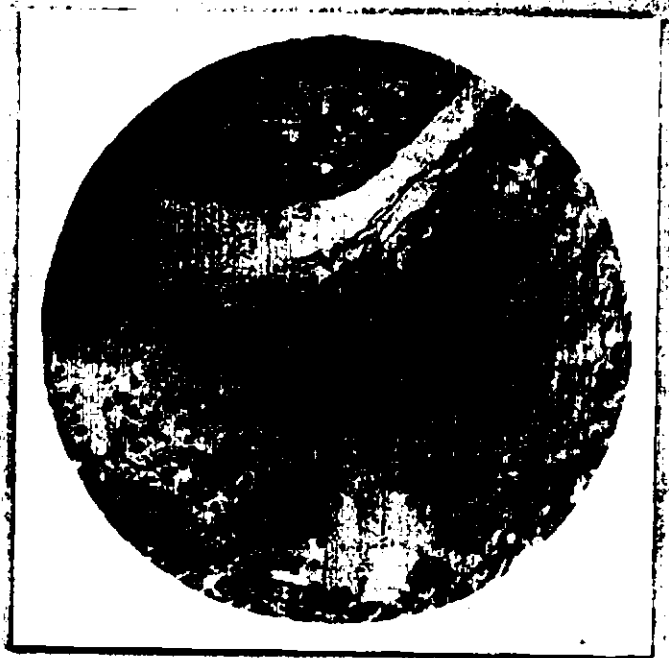
TESTIS

		146	152	167	176	190	193	205	207	221	222	224	229	254	256	277	281	
Tubuli Seminiferi	Grade of Reduction	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	T. Propria	Thickening	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Fibrous Degeneration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Hyaline Degeneration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sertoli's Cells	Quantity	N	N	+	+	+	+	+	+	+	+	+	+	+	N	+	N
		Degeneration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Spermatogonien	Quantity	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
		Degeneration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Spermatocytes	Quantity	N	N	N	N	N	+	+	N	+	N	N	+	+	N	+	N
		Degeneration	-	-	+	+	-	+	+	-	-	-	-	-	-	-	-	-
P. Spermatis	Quantity	N	+	+	+	+	+	+	N	+	+	+	+	+	+	+	+	
	Degeneration	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Spermatids	Quantity	N	+	+	+	+	+	+	N	+	+	+	+	+	+	+	+	
	Degeneration	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Spermatozoa	Quantity	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Degeneration	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Giant Cells		+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Congestion		+	-	-	-	-	-	-	-	+	+	+	-	+	+	+	+	
Edema		+	-	+	+	-	+	-	-	+	+	+	-	-	-	-	-	
Swelling of Connective Tissue		-	-	-	+	-	+	-	-	+	+	+	-	-	-	-	+	
Hemorrhage		-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	
STROMA	Round Cell Infiltration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	
	Increase of Connective Tissue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	
	Degeneration of Endothelium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Vessel Walls	Hyaline Degeneration	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-
		Swelling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Leydig's Cells	Quantity	N	+	+	N	N	+	+	+	+	N	+	+	N	+	+	+
Yellow Granules		-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
T. albuginea	Congestion		+	-	-	-	-	+	+	+	+	+	-	-	-	+	+	
	Hemorrhage		-	-	-	-	-	-	+	-	+	+	-	-	-	-	-	+
	Round Cell Infiltration	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	+	
	Degeneration of Vessel Endothelium	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	
Increase of Connective Tissue		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grade of Atrophy		I	II	III	III	IV	III	III	III	III	III	III	III	III	III	II	II	

+++ = Disappearance

[REDACTED]

Hemorrhages in interstitial tissues.



R 167

X 210

Edematous swelling of interstitial
tissues and atrophy of testicular tissues.



[REDACTED]

727

316

X 100

[REDACTED]

[REDACTED]

Pituitary body

[REDACTED]

P I T U I T A R Y - B O D Y .

(A) Microscop. Investigation.

I52. [REDACTED]

Moderate capillary congestion and edematous swelling of capillary walls with slight swelling of pericapillar tissues. Slight hyperplasia, swelling and desquamation of endothelial cells.

Considerable degeneration of basophilic parenchymatous cells.

I67.

Slight capillary-congestion and middling severe perivascular edematous swelling. Slight hyperplasia of endothelial cells.

Moderate cloudy swelling and vacuolar degeneration of basophilic and other parenchymatous cells.

Slight edematous swelling of posterior lobe.

I80.

Moderate capillary congestion and slight perivascular edema. Slight cloudy swelling of basophilic cells and slight edematous swelling of posterior lobe.

221.

Capillary congestion with some leucocytes (esp. eosinophilic leucocytes) as capillary contents. Slight hyperplasia, swelling and desquamation of endothelial cells.

Slight parenchymatous degeneration and slight edematous swelling of posterior lobe.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

222.

Moderate capillary congestion, swelling of capillary-walls and edema of subendothelial layers. Slight degeneration of parenchymatous cells and dissociation of cell-arrangements.

Slight congestion and slight perivascular hemorrhages of posterior lobe.

224.

Moderate congestion of capillary and edema of subendothelial layers. Cloudy swelling of parenchymatous cells (esp. basophilic cells), and dissociation of cellular-arrangements with edematous swelling of basal membrane.

Slight hyperplasia and desquamation of capillary endothelial cells.

229.

Severe capillary congestion and swelling of capillary-walls.

Dissociation of cellular-arrangements and considerable parenchymatous degeneration.

256.

Severe capillary congestion with some leucocytes as capillary contents.

Slight hyperplasia and swelling of capillary endothelial cells.

Leakage of erythrocytes in lumina of acinus.

Almost intact parenchymatous cells.

Slight congestion and slight hemorrhages of posterior lobe.

727.

Moderate capillary congestion, edematous swelling of subendothelial layers and perivascular edema. Slight dissociation of cell-arrangements

and degeneration of parenchymatous cells, esp. at perivascular portions.

[REDACTED]

[REDACTED]

Swelling of basal membrane.

[REDACTED]

Slight hyperplasia of neuroglia-cells at posterior lobe.

731.

Moderate capillary congestion and edematous swelling of capillary-walls with slight hyperplasia of endothelial cells.

Dissociation of cell-arrangements and slight degeneration of parenchymatous cells, esp: vacuolar degeneration of basophilic cells. Edematous swelling of basal membrane.

[REDACTED]

(B) S U M M A R Y

[REDACTED]

A). Anterior lobe.

1) Generally with some capillary congestion.

Congestion in slight degree. 2 cases.

" in medium degree. 6 cases.

" in severe degree. 2 cases.

Congestion with some leucocytes as capillary contents.
2 cases.

Congestion with some bacterial masses as capillary-contents.
0 cases.

Congestion, accompanied with perivascular hemorrhages.
0 cases.

2) After that, occurred some signs of so-called serous inflammations, with considerable subendothelial edematous swelling.

Serous inflammation, accompanied with some dissociation of cellular arrangements. 4 cases.

Serous inflammation, accompanied with some degenerative changes of capillary endothelial cells (swelling, clouding and desquamation). 2 cases.

I classified these changes, according to the concept "Pituitaritis serosa".

Pituitaritis serosa I. degree. 2 cases.

II. degree. 4 cases.

III. degree. 1 cases.

[REDACTED] 822 [REDACTED]



3) Then it shows some degenerative changes of parenchymatous cells, esp. at perivascular portions.

Cloudy swelling in slight degree.	4 cases.
" in medium degree.	4 cases.
" in severe degree.	1 cases.
Cloudy swelling with considerable vacuolar degeneration.	2 cases.

B). Posterior lobe.

Sometimes, with considerable congestion and following changes.

Considerable congestion.	2 cases.
" ,with perivascular hemorrhages.	2 cases.
" ,with slight hyperplasia of neuroglia cells.	1 cases.

Accordingly, the significant main pathological changes are considerable Pituitaritis serosa (congestion, serous exudation and some parenchymatous degeneration).



PITUITARY BODY

		152	167	180	221	222	224	229	256	277	281	
Capsule	Congestion	+	+	+	+	+	+	+	+	+	+	
	Edema	+	+	+	+	+	+	+	+	+	+	
	Hemorrhage	+	+	+	+	+	+	+	+	+	+	
	Infiltration of Round Cells	+	+	+	+	+	+	+	+	+	+	
	Congestion	+	+	+	+	+	+	+	+	+	+	
Adenohypophysis	Edema	+	+	+	+	+	+	+	+	+	+	
	Hemorrhage	+	+	+	+	+	+	+	+	+	+	
	Infiltration of Round Cells	+	+	+	+	+	+	+	+	+	+	
	Chromophobe C	Parenchymatous Degeneration	+	+	+	+	+	+	+	+	+	+
		Atrophy	+	+	+	+	+	+	+	+	+	+
		Pyknosis	+	+	+	+	+	+	+	+	+	+
		Karyorrhexis	+	+	+	+	+	+	+	+	+	+
		Karyolysis	+	+	+	+	+	+	+	+	+	+
	Eosinophile C	Parenchymatous Degeneration	+	+	+	+	+	+	+	+	+	+
		Atrophy	+	+	+	+	+	+	+	+	+	+
		Pyknosis	+	+	+	+	+	+	+	+	+	+
		Karyorrhexis	+	+	+	+	+	+	+	+	+	+
		Karyolysis	+	+	+	+	+	+	+	+	+	+
	Basophile C	Parenchymatous Degeneration	+	+	+	+	+	+	+	+	+	+
		Atrophy	+	+	+	+	+	+	+	+	+	+
Pyknosis		+	+	+	+	+	+	+	+	+	+	
Karyorrhexis		+	+	+	+	+	+	+	+	+	+	
Karyolysis		+	+	+	+	+	+	+	+	+	+	
Neurohypophysis	Necrosis	+	+	+	+	+	+	+	+	+	+	
	Congestion	+	+	+	+	+	+	+	+	+	+	
	Edema	+	+	+	+	+	+	+	+	+	+	
	Hemorrhage	+	+	+	+	+	+	+	+	+	+	
	Infiltration of Round Cells	+	+	+	+	+	+	+	+	+	+	
Pars intermedia	Hemorrhage	+	+	+	+	+	+	+	+	+	+	
	Infiltration of Round Cells	+	+	+	+	+	+	+	+	+	+	
	Color of Colloid	V	R	V	R	R	R	R	R	R	R	
	Vacuole in Colloid	+	+	+	+	+	+	+	+	+	+	
	Desquamation of Cyst wall cells	+	+	+	+	+	+	+	+	+	+	

V. violet
R. red

[REDACTED]

Edematous swelling of subepithelial layers and some degeneration of parenchymatous cells.

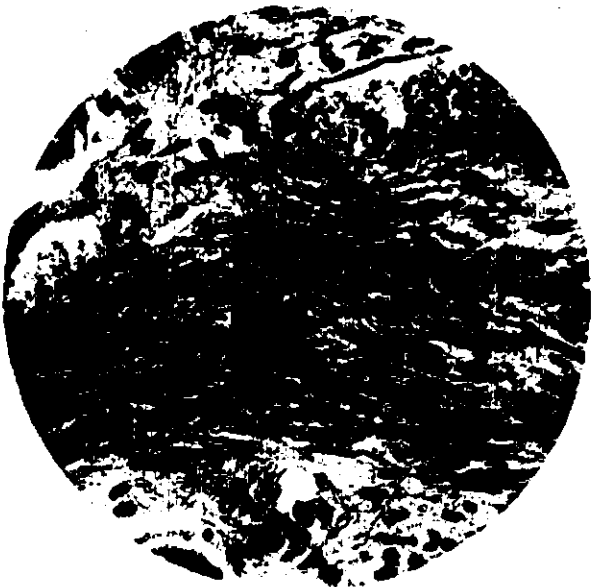
[REDACTED]



224

x 270

Congestion and slight hemorrhages, accompanied with some increased glia cells, in posterior lobe.



727

x 210

[REDACTED]

[REDACTED]

325

[REDACTED]

Vacuolar degeneration of parenchymatous cells.

[REDACTED]



224

x130

Pycnotic changes of basophilic cells.



152

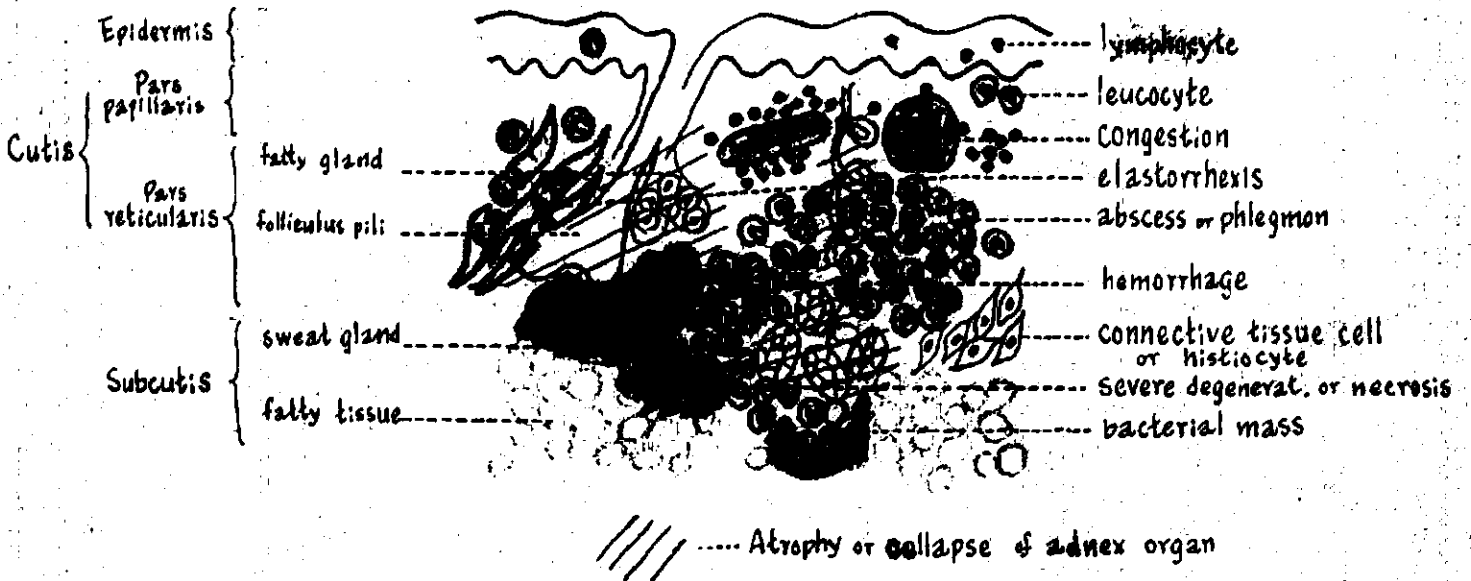
x270

[REDACTED]

[REDACTED]

326

Skin

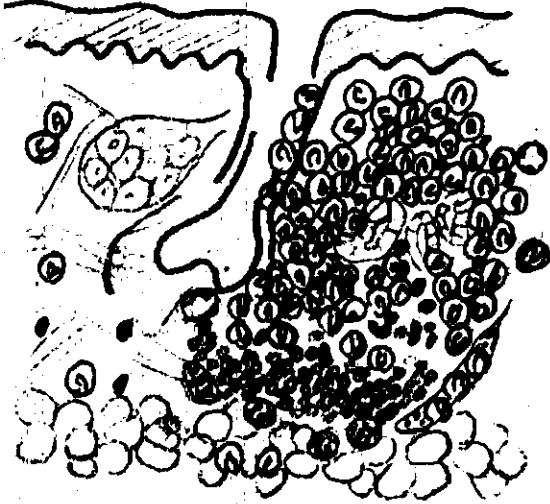


[REDACTED]

S K I N

(A) Microscopical Investigation.

152

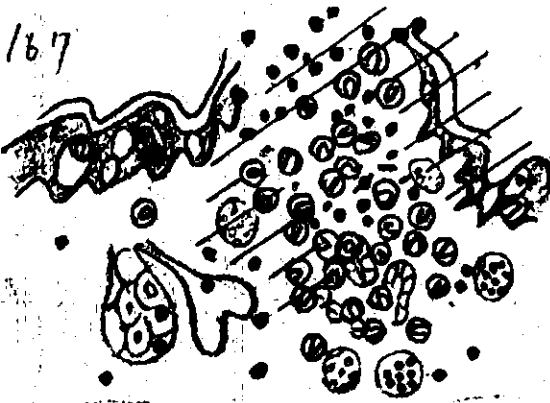


152.

[REDACTED]

Multiple pea-large abscesses in Str. reticulare: with plenty leucocytes, some erythrocytes and their fragments, and some ruined masses of connective tissues and sweat gland cells, accompanied with severe perifocal hemorrhagic reactions.

167

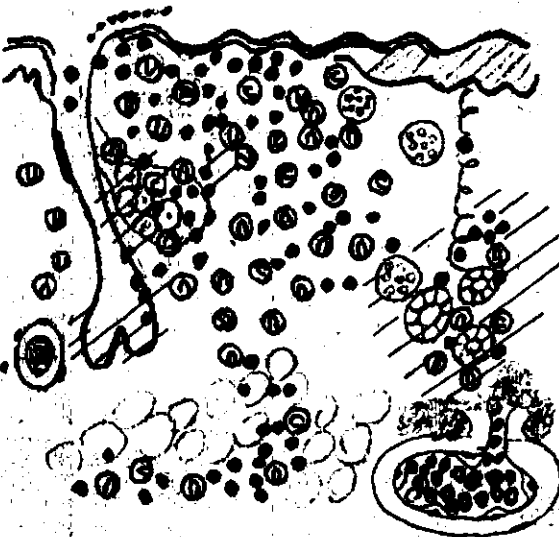


In the neighbouring tissues, exist some congested blood-vessels, basophilic stained degenerative connective tissues and sweat glands in collapse. Edema of epidermis, with pycnotic or karyolytic pickle cells.

167.

Multiple pea-large abscesses in Str. subpapillare with plenty of leucocytes, some lymphocytes and erythrocytes, and their fragments, accompanied with degenerated or ruined adnex-organs.

180



Neighbouring tissues with some congested blood-vessels and lymph-vessels.

Considerable edema of adjacent epidermis and with somewhat pycnotic or karyolytic pickle cells.

180.

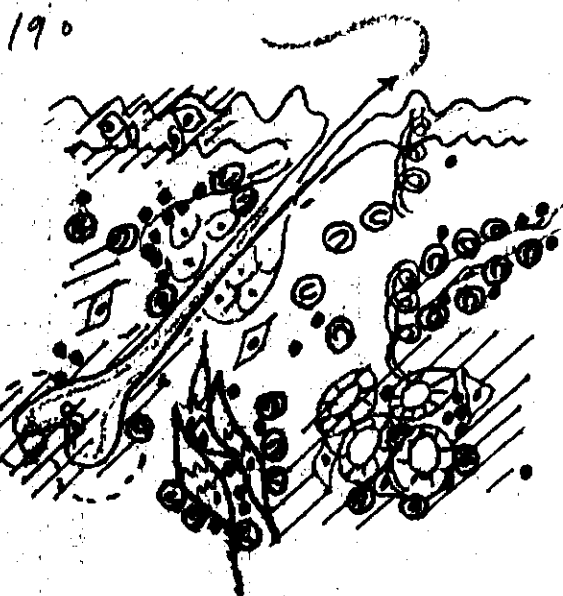
Phlegmons in subcutaneous tissues:

[REDACTED]



some capillaries in necrotic changes with embolic cellular masses and ruined capillary-walls and severe perivascular changes (leucocytes, edema and hemorrhages), which invade to the neighbouring tissues phlegmoneously with plenty of leucocytes, some lymphocytes and erythrocytes or their fragments, accompanied with degenerated or ruined adnex-organs.

187.



Considerable capillary congestion in subcutaneous tissues with somewhat edema and slight perivascular lymphocytes-accumulation.

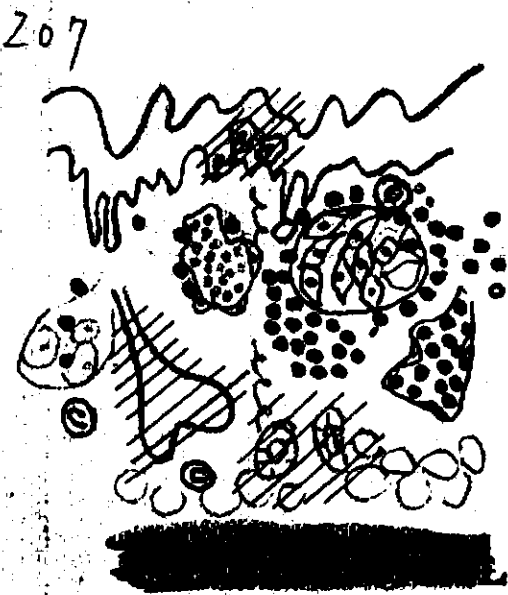
Sweat glands in slight collapse.

190.

Considerable capillary congestion and some perivascular leucocytes (and some lymphocytes) accumulation in subcutaneous tissues, esp. along folliculi pili, invading into the neighbouring adnex-organs to form some abscesses.

Accompanied with edematous swelling of connective tissues and Folliculi pili and some considerable degenerative changes of epidermis (edema and pickle cells in pycnosis or karyolysis).

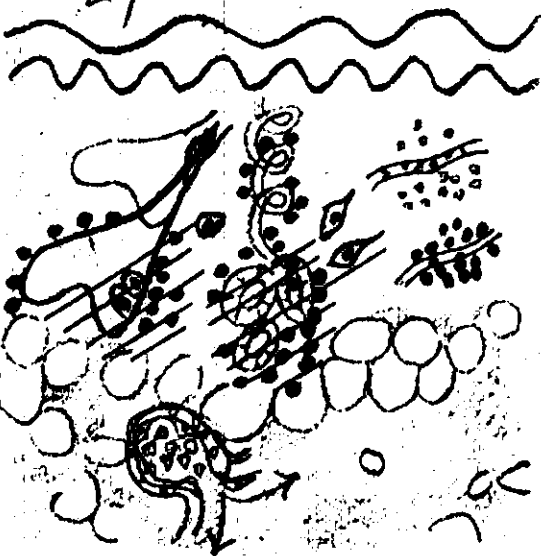
207.



Considerable congestion and some perivascular lymphocytes infiltration, broadly in subcutaneous

[REDACTED]

227



tissues, accompanied with somewhat swollen connective tissues and some circumscribed small knots-formation with some increased connective tissues and some dilatated capillaries and lymph-capillaries.

Edema of epidermis, with some pyknotic or karyolytic cells of Stratum Malpighii.

221.

Multiple remarkable perivascular leucocytes-emigration, necrotic ruing of capillaries walls and following diffuse hemorrhages (with some leucocytes) and severe edema in subcutaneous fatty tissues.

Slight hemorrhages and some lymphocytes accumulation in subpapillar tissues along the blood-vessels and efferent ducts of sweat glands. Atrophy of Folliculi pilli.

222.

Diffuse intense leucocytic-hemorrhagic infiltration in subcutaneous fatty tissues:

Some blood-vessels in severe necrotic changes with plenty of leucocytes or their fragments, severe necretic ruins of walls and the most intense perivascular leucocytic-hemorrhagic changes and intense edema.

These inflammatory changes spread furthermore

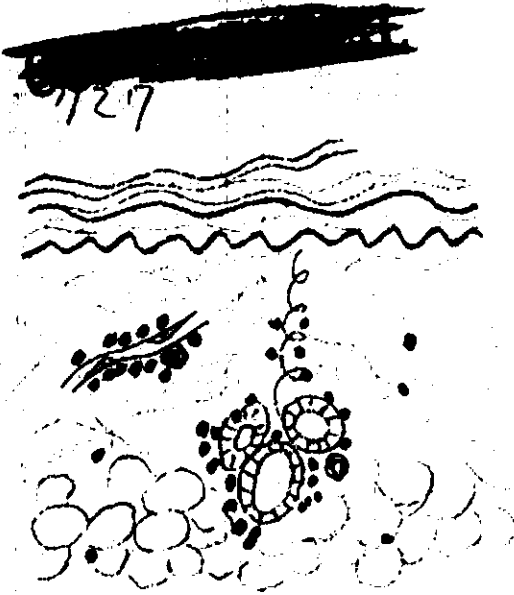
[REDACTED]

[REDACTED]

all over the neigh-bouring subcutaneous tissues
or cutaneous and epidermal tissues, accompanied
with severely degenerated or ruined adnex-organs.
727.

Hyperkeratosis.

Slight edema in cutis and epidermis, very slight
lymphocytes infiltration along blood-vessels
and sweat glands and no remarkable changes
else.



[REDACTED]

[REDACTED]

[REDACTED]

(B) S U M M A R Y

(I)

The bird's-eye view of all investigated cases.

152. Multiple pea-large abscesses in Str. reticulare. Severe perifocal hemorrhagic reactions with congestion, degenerative connective tissue fibres and ruin of sweat gland.
167. Multiple pea-large abscesses in Str. subpapillare. Congestion of blood- and lymph-vessels and edema.
180. Phlegmons in cutaneous or subcutaneous tissues. Some capillaries in necrotic changes with embolic cellular masses and diffuse hemorrhagic infiltration. Ruin of adnex. organs.
187. Considerable capillary congestion and perivascular lymphocytes infiltration. Ruin of sweat glands.
190. Multiple suppurative abscesses (which involve adnex organs in ruin). Congestion and perivascular leucocytes accumulations.
207. Congestion and perivascular lymphocytes infiltration broadly in subcutaneous tissues. Some small circumscribed knot-formation with connective tissue cells, surrounded with dilated vessels and lymphocytes-accumulation.
221. Phlegmonous leucocytes infiltration in cutaneous and subcutaneous tissues with hemorrhages and severe edema. Ruin of adnex organs.
222. Diffuse intense leucocytic-hemorrhagic infiltration in subcutaneous fatty tissue. Some blood-vessels in severe necrotic changes. Ruin of adnex organs.
- [REDACTED] lymphocytes infiltration. Slight hyperkeratosis.

[REDACTED]

(2)

[REDACTED]

Phlegmons or abscesses in 6 cases, Multiple miliary or super-miliary abscesses in 3 cases, with more or less perifocal reactive hemorrhages. Phlegmoneous infiltration extends broadly to subcutaneous fatty tissues in 3 cases.

In these foci, some blood vessels with severe necrotic walls and in many cases, much bacterial-cellular embolic masses in spaces of blood vessels. Much leucocytes-accumulation in center of focus and perivascular leucocytes and lymphocytes infiltration with severe congestion and hemorrhages in perifocal tissues. Cutaneous tissues and adnex organs, especially folliculi pili and sweat glands fell into degeneration or in ruin in neighbouring parts of focus. Epidermis upon these foci fell also into degeneration, especially in rete Malpighii.

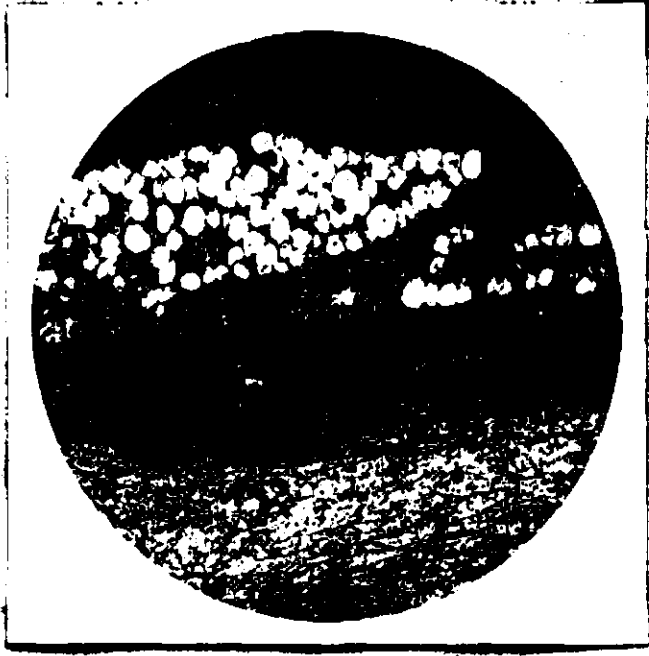
Slighter degeneration are recognised in other 3 cases; considerable congestion and perivascular serous and round cell infiltration, and ruin of adnex organs. In 1 case of them is knot-formation in Str. subpapillare, -namely, accumulation of connective tissue cells, with perifocal dilated blood- and lymph-vessels and lymphocytes infiltration.

[REDACTED]

R-221 Hemorrhages in subcutaneous tissues.

x 59

[REDACTED]



R-180 Perivascular hemorrhages.

x 58



[REDACTED]

[REDACTED]

[REDACTED]

R-222 Collapse of adnex-organs.

X 43.8

[REDACTED]



R-207 Accumulation of some histiocytes
in Str.papillare.

X 130



[REDACTED]

[REDACTED]

[REDACTED]

R-169 Abscess in cutis.

x 9.5

[REDACTED]



R-152 Abscess in cutis, in high power.

x 66



Lymphnode

Hyperplasia of Germ Center

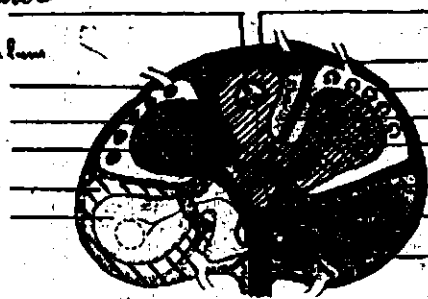
Hyperplasia of Reticulum cell.

Congestion of Sinus

Necrosis.

Normal Sinus

Exudation



No remarkable changes.

Bacterial masses

Leucocytes dissemination

Exudation of Sinus.

Bionecrosis.

Sinus catarrh.

Hemorrhage of Follicle.

Congestion of blood vessel.

[REDACTED]

[REDACTED]

LYMPH - N O D U L U S .

(A) Microscop. Investigation .

16. Mesenterial : No remarkable changes.
16. Peribronchial : Considerable congestion in medullary sinuses and slight perivascular edema with very slight hyperplasia of reticulum-cells.
85. Peribronchial lymph-nodulus :
Lymphadenitis tuberculosa obsoleta, with caseous masses in focal parts and considerable histiocytes-walls with some giant cells in perifocal parts.
85. Mesenterial :
Remarkable hyperplasia of reticulum-cells in medullary sinuses, without remarkable congestion.
167. Mesenterial.
Almost normal. Slight catarrh of peripheral sinuses and slight hyperplasia of reticulum-cells in medullary sinuses. No remarkable congestion and no considerable reduction of follicular tissues.
207. Peribronchial.
Fibrous capsule. No remarkable changes in peripheral sinus. Slight congestion and slight swelling of pulpa-meshes with some increased reticulum-cells. No considerable reduction of pulpamashes.

[REDACTED]

[REDACTED]

221. Mesenterial.

Slight catarrh of peripheral sinuses with considerable congestion (with some leucocytes, especially some eosinophilic cells in capillaries) in follicular tissues.

Considerable congestion and some slight hemorrhages in pericapsular tissues.

254. Mesenterial.

No remarkable changes in capsule and slight catarrh of peripheral sinuses. Multiple submiliary caseous changes in some germinative centres with slight hyperplasia of histiocytes in perifocal parts.

In other yet remained follicular tissues, slight hyperplasia of reticulum-cells in pulpa-meshes and slight swelling and slight reduction of lymphocytes in pulpa-meshes.

256. Mesenterial.

No significant changes in capsules and peripheral sinuses. Considerable congestion and slight hyperplasia of reticulum-cells in medullary sinuses. Slight swelling of pericapillar tissues.

256. Peribronchial : Lymphadenitis caseosa.

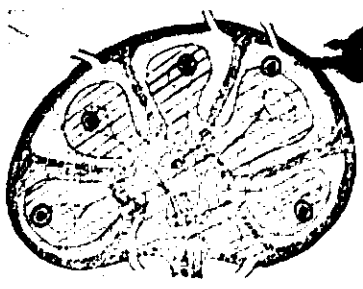
Multiple supermiliary caseous changes in some germinative centres with considerable proliferative changes (slight hyperplasia of histiocytes). Considerable congestion of medullary sinuses with edematous swelling of capillary-walls and some localised hemorrhages.

Slight swelling and considerable diminution of lymphocytes in other yet remained follicular tissues.

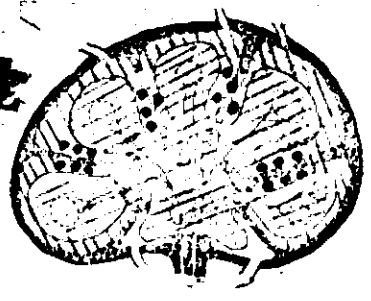
[REDACTED]

[REDACTED]

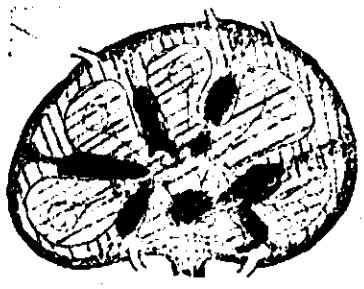
[16] mesenterial



[85] mesenterial



[16] peribronchial



[85] peribronchial



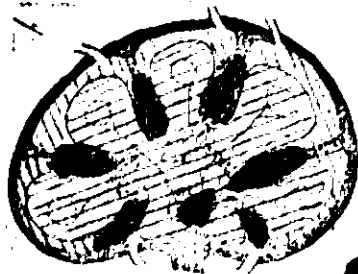
[REDACTED]

[REDACTED]

[146]



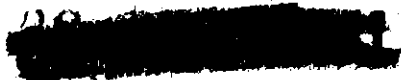
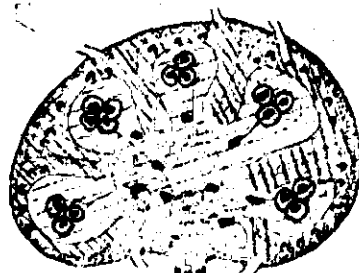
[107]



[167]

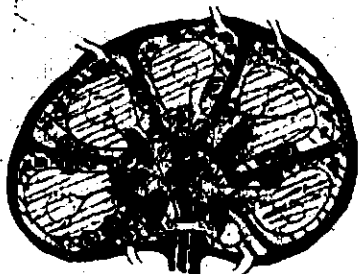


[221](a)

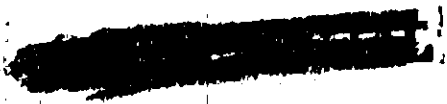




[221] (6)



[256]



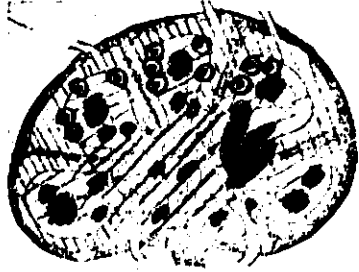
[256]



[256] op



[254] op



[REDACTED]

[REDACTED]

The bird's-eye-view of the pathological changes in some microscopical slices, which I have received.

Other cases are not accompanied with any significant changes macroscopically.

- | | |
|---------------------|---|
| 16. Peribronchial. | Medullary congestion.
Slight pericapsular edema. |
| 18. Mesenterial. | No remarkable changes. |
| 85. Peribronchial. | Lymphadenitis tuberculosa obsoleta. |
| 85. Mesenterial. | Slight catarrh, remarkable medullary congestion. |
| 167. Mesenterial. | Slight catarrh of sinus. |
| 207. Peribronchial. | No remarkable changes. |
| 221. Mesenterial. | Slight catarrh of sinus.
Considerable congestion with some leucocytes (esp. eosinophilic cells) as capillary contents.
Considerable congestion and some slight hemorrhages in pericapsular tissues. |
| 254. Mesenterial. | Slight catarrh of sinus.
Multiple submiliary caseous changes in germinative centres, due to glanders-infection? |
| 258. Peribronchial. | Lymphadenitis caseosa. |
| 256. Mesenterial. | Considerable medullary congestion. |
-

~~CONSIDERABLE~~ Considerable congestion and some leucocytes:

[REDACTED]

[REDACTED]

as signs of initial stage of acute inflammation.

In 2 cases, with some caseous changes in germinative centres :

perhaps due to glanders-infection. (*)

In some other cases, with slight reactive catarrh of sinus :

as not so significant changes.

*) . It can't be determined exactly, whatever due to glanders-
or tuberculosis-infection.

[REDACTED]

[REDACTED]

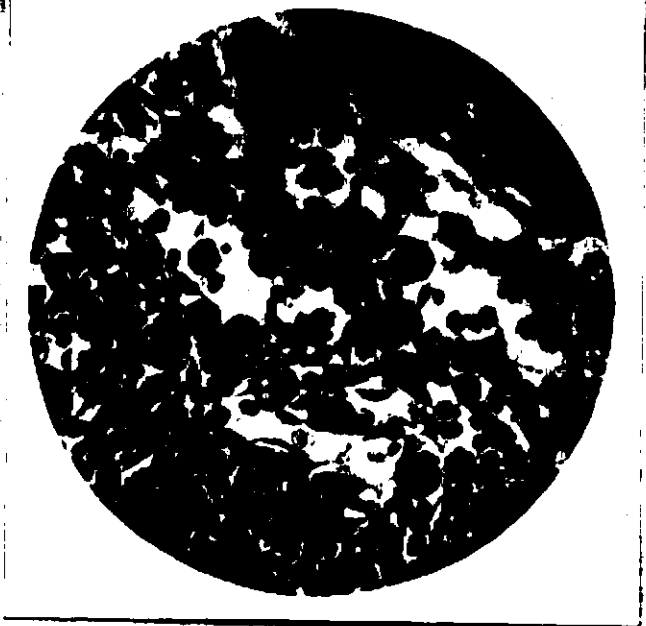
Follicular congestion, accompanied with some hyperplasia of reticulum cells and histocytic cells.



R 207

x 270

The same changes, in high power.



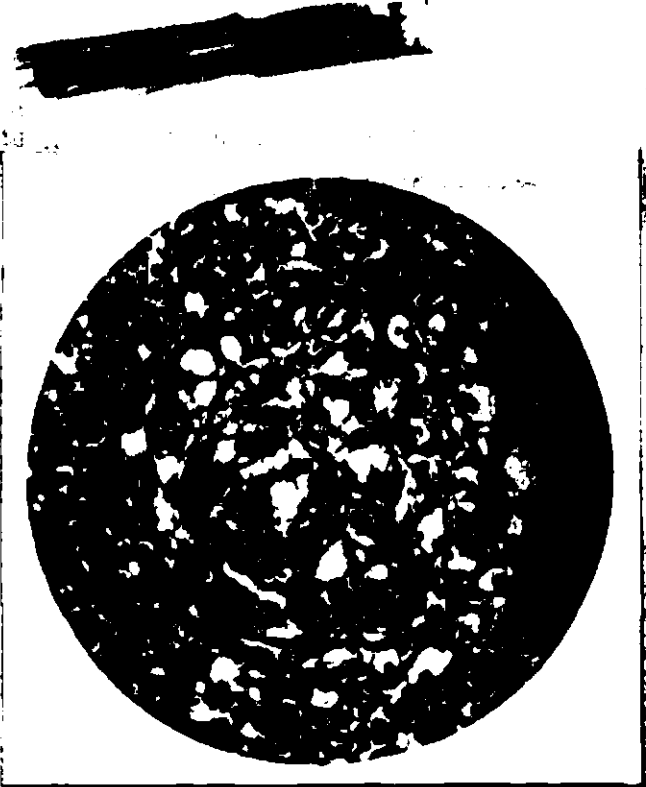
[REDACTED]

[REDACTED]

[REDACTED]

346

x 310

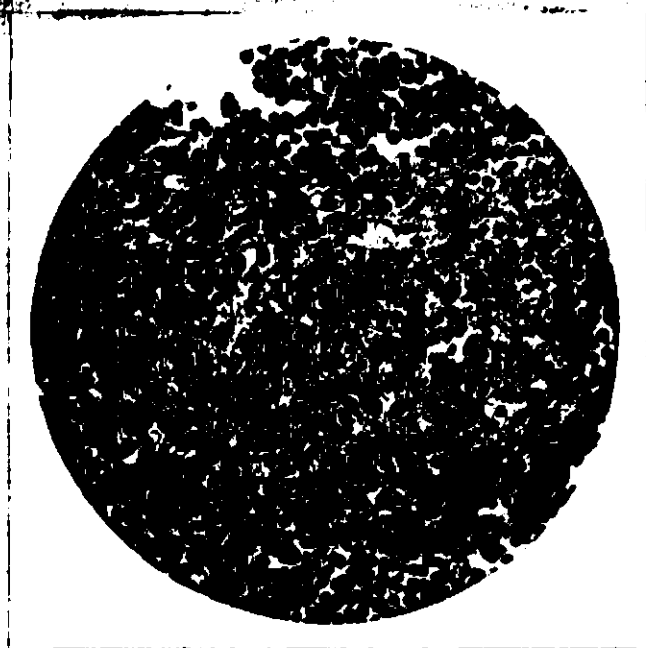


Edematous swelling of reticulum cells
and reticulum faser in follicle.

R 167

x 310

Hyalinisation of follicular tissues,
accompanied with slight hemorrhages.



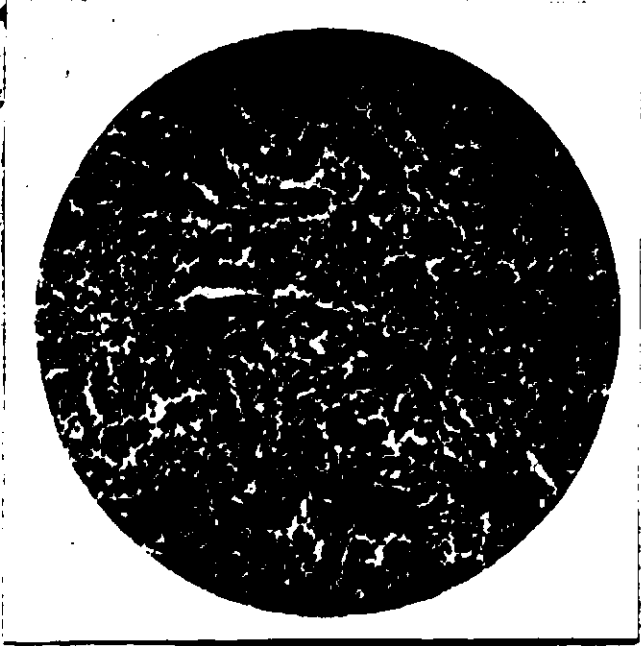
347

x 280

[REDACTED]

[REDACTED]

Serous fluids(edematous swelling)
and edematous swelling of reticulum
faser.



R 2017

x 150

Germinative centre in reticular form,
accompanied with hyperplasia of
reticulum cells.



[REDACTED]

[REDACTED]

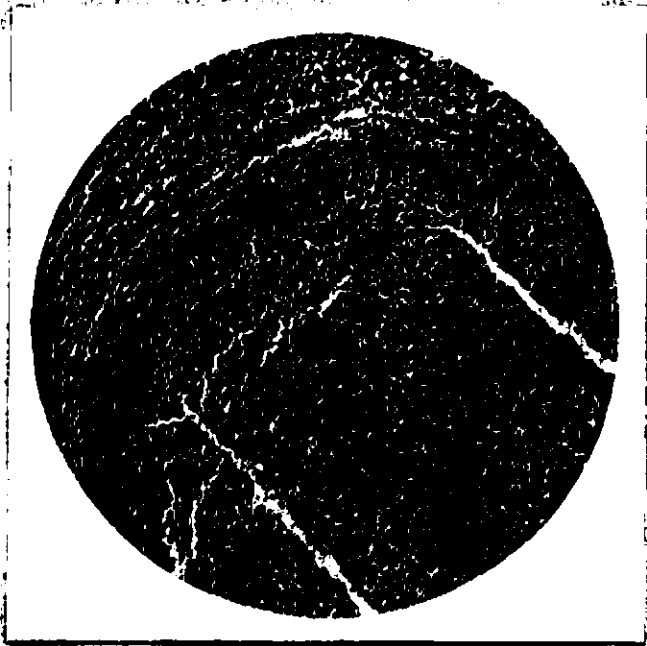
348

x 200

[REDACTED]

[REDACTED]

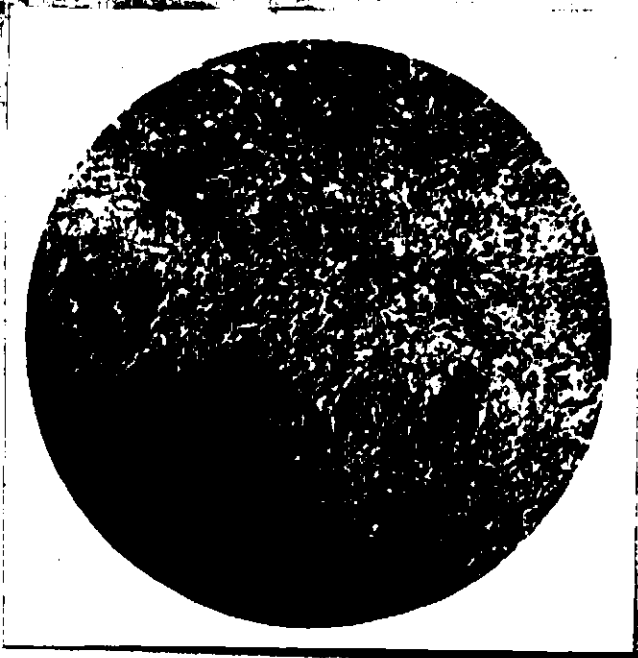
Diffuse necrosis in follicular tissues,
due to glanders-infection.



R 731

x 70

Glanders-knots in follicular tissues.
With some giant cells and hyperplasia
of reticulum cells.



[REDACTED]

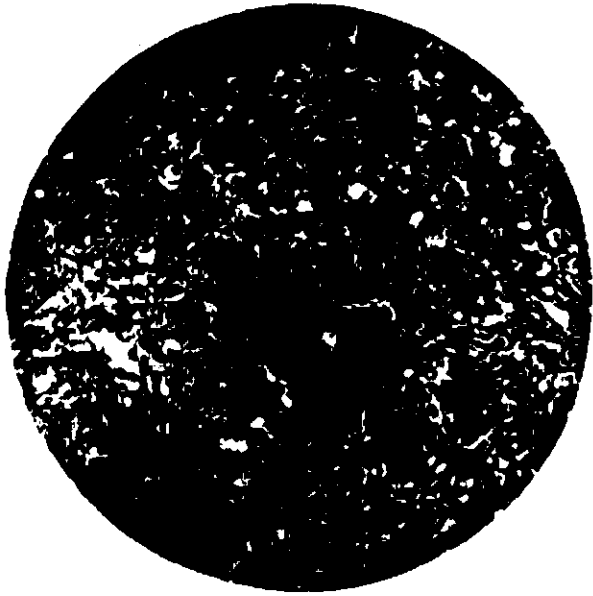
[REDACTED] 349

x 130

[REDACTED]

[REDACTED]

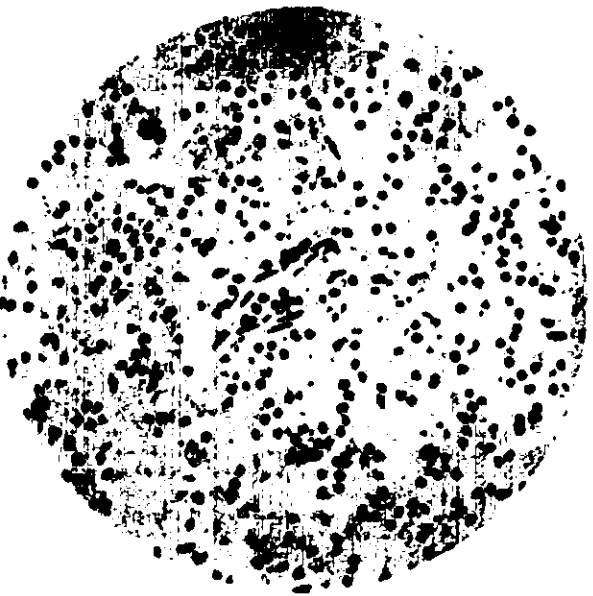
Glanders-knot with some giant cells,
in high power.



R 85 (a)

x 270

Intense edema in follicular tissues.



[REDACTED]

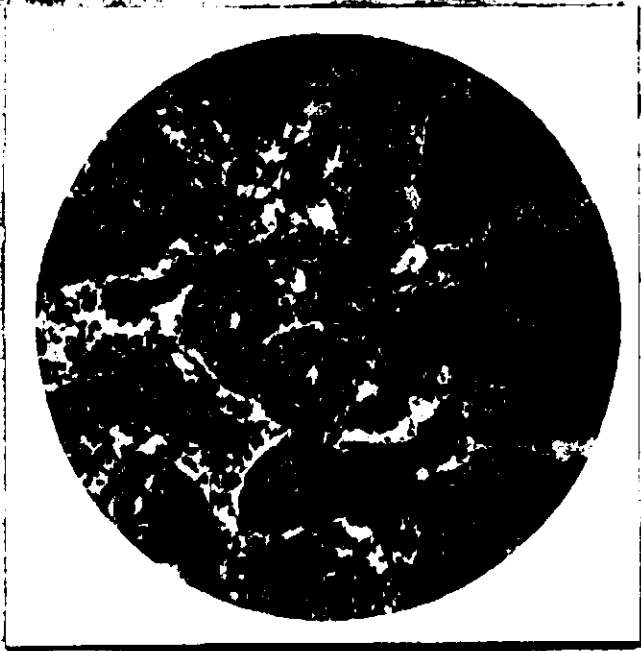
[REDACTED]

350

x 310

[REDACTED]

Fibroadenic changes, accompanied with hyperplasia of reticulum faser.



[REDACTED]

R 156

x 130

Hyperplasia of reticulum cells, accompanied with edematous swelling in trabecle, in high power.



[REDACTED]

[REDACTED]

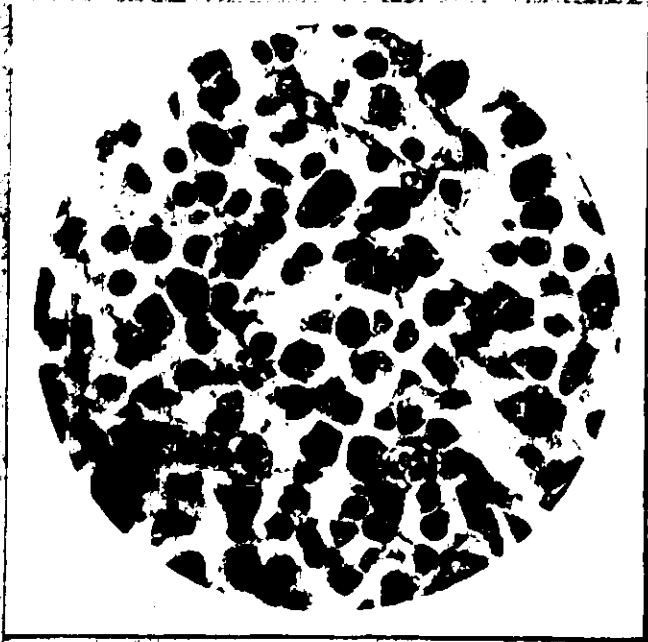
351

x 340

[REDACTED]

[REDACTED]

[REDACTED]



R 207

X 1730

Plasma cell reaction in capsule.

348

[REDACTED]

[REDACTED]

R 207

X 620

352

[REDACTED]

[REDACTED]

Other Organs

[REDACTED]

[REDACTED]

[REDACTED]

M U S C L E .

(A) Microscopical Investigation.

I46. (1)

Multiple supermiliary or millet-corn large abscesses in muscular tissues. In abscess exist a large quantity of decayed masses (numerous leucocytes and their fragments, decayed masses of muscular tissues and some erythrocytes).

These abscesses spread to perifocal tissues intermuscularly with more or less considerable reactive changes (hemorrhages and leucocytes-infiltration).

Muscular tissues at perifocal parts fall into waxy necrosis.

I46. (2)

Multiple miliary or millet-corn large abscesses with the same changes, as above mentioned.

I80. (1)

Multiple supermiliary or millet-corn large abscesses in muscular tissues. In abscess accumulate a large quantity of decayed masses (numerous leucocytes and their fragments, decayed masses of muscular tissues and some erythrocytes) with more or less hemorrhagic perifocal changes.

These hemorrhagic-leucocytic cell-infiltration propagate themselves to the neighbouring tissues intermuscularly with somewhat hemorrhagic and leucocytic cell-infiltrations. Muscular tissues at perifocal parts fall into waxy necrosis and fragmentation.

[REDACTED]

[REDACTED]

[REDACTED]

I80. (2)

Multiple supermiliary or millet-corn large abscesses in muscular tissues, with the same changes as above mentioned.

In the neighbouring tissues exist leucocytic and hemorrhagic processes: severe edema, fibrinous separation, severe congestion and perivascular leucocytes infiltration.

These leucocytic cell-infiltration spread to the neighbouring tissues with more or less haemorrhagic and leucocytic cell infiltration (in intermuscular tissues exist severe edema, fibrinous separation, severe congestion and perivascular leucocytic cell infiltration).

I80. (3)

Multiple millet-corn large abscesses with the same hemorrhagic and leucocytic cell-reactions.

At the margin-part of the abscess, slight increase of histiocytes, esp. at perivascular parts.

These inflammatory infiltration propagate themselves intermuscularly with more or less hemorrhagic and leucocytic cell-reactions.

I80. (4)

Multiple supermiliary abscesses with the same changes, as above mentioned. In the necrotic places exist yet remained nervous bundles. At the margin of more or less degenerated nervous bundles, slight increase of neuroplasts to form some cell groups.

[REDACTED]

180. (5)

Multiple military abscesses with the same changes, as above mentioned.

180. (6)

Multiple rice-corn-large abscesses with the same changes, as above mentioned.

180. (7)

Pea-large (1 X 0.5 cm) abscess, bounded with thick walls of increased connective tissues more or less sharply.

The most places of abscess are rearranged with a large quantity of increased epithelial cells with frothy protoplasm (reparation or purification of abscess with myoblasts) and a little quantity of yet remained residual masses of ruined muscular cells and leucocytes. At the perivascular parts in abscess accumulate some round-cells (lymphocytes and typical plasma-cells) and in the perifocal places of abscess exist a large quantity of increased connective tissues to form the bounding walls, in which exist muscular cells in various types: some of them in degeneration and some of them in regeneration with increase of nucleus to form frequently giant cells (regeneration of muscle cells).

With perivascular round-cells-infiltration (lymphocytes and plasma-cells).

180. (7)

0.8 X 0.4cm large abscess with the same changes, as above mentioned.

180. (8)

0.6 X 0.3cm large abscess with the same changes.

[REDACTED]

[REDACTED]

254.

Multiple poppy seed-large abscesses in muscular tissues.

Hematogenous metastatic abscess in which focal parts exist ruined arterioles with a large quantity of decayed masses of leucocytes as contents and ruined blood-vessel-walls.

Extremely severe leucocytic or necrotic processes at these peri-arteriolar parts with a large quantity of leucocytes and their various fragments, edematous swelling and hemorrhages to form the most parts of abscesses.

These inflammatory changes propagate themselves to the neighbouring tissues with more or less exudative and hemorrhagic reactions (severe edematous swelling, hemorrhages and leucocytes-emigration at perivascular tissues).

256.

Multiple supermiliary or millet-corn large abscesses in muscular tissues.

Hematogenous metastatic abscess with severe hemorrhagic and leucocytic cell-reactions.

In the focal places of abscess exist ruined arterioles with a large quantity of leucocytes and their fragments as contents and severely decayed blood-vessel-walls.

These inflammatory processes propagate themselves to the neighbouring tissues with severe hemorrhagic and leucocytic cell-reactions.

256. (2)

Multiple supermiliary or millet-corn large abscesses in muscular tissues.

~~Multiple supermiliary or millet-corn large abscesses in muscular tissues.~~ Hematogenous metastatic abscess with severe hemorrhagic or leucocytic

[REDACTED]

[REDACTED]

or leucocytic cell-reactions. In the focal places of abscess exist decayed arterioles with a large quantity of leucocytes and their fragments as content and ruined vessel-walls.

Severe leucocytic and necrotic processes at the periarteriolar tissues to form the most parts of abscess.

These inflammatory processes spread to the neighbouring tissues with severe hemorrhages and leucocytic cell-reactions.

In the intermuscular tissues: severe edematous swelling, congestion, hemorrhages and perivascular leucocytes-infiltrations.

[REDACTED]

[REDACTED]

(B) S U M M A R Y .

Miliary, supermiliary or millet-corn large abscesses in oval or irregular forms. These are formed mainly hematogenously from infected wounds.

In the focal places exist frequently decayed arterioles with a large quantity of leucocytes and their various fragments as contents and ruined blood-vessel-walls.

Severe leucocytic and hemorrhagic processes at the periarteriolar parts to form the most parts of abscesses: in abscesses exist extremely a large quantity of basophilic necrotic masses which originate from mainly leucocytes or their fragments in various forms and decayed muscular tissues.

These hemorrhagic and necrotic changes propagate themselves to the neighbouring tissues intermuscularly with more or less remarkable exudative-hemorrhagic reactions (severe edema, severe congestion, hemorrhage and leucocytic infiltrations at the perivascular parts of intermuscular connective tissues).

Muscular cells at the perifocal parts fall into waxy necrosis (waxy swelling, disappearance of muscle-striations and fragmentation).

With the lapse of time, it inclines to get some reparative and regenerative processes:

At perifocal intermuscular tissues, slight increase of histiocytes, endothelial cells and adventitial cells. For example, in No. 10, shows it some cell-groups of slightly increased histiocytes at the margin-places of abscesses.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Nervous bundles in abscesses fall into also degeneration, but more resistible. At the margin-parts of more or less degenerated nervous bundles, accumulate some neuroplasts to form some cell-groups, so as in No. 10.

In No. 13, abscesses are bounded with the thick walls of increased connective tissues. In abscesses exist, instead of decayed masses, a large quantity of myoblasts which arranged densely cell by cell, to reparate and purify the necrotic places.

In the increased connective tissues, exist some perivascular round-cell-infiltration (lymphocytes and plasma-cells) and muscle cells in various forms: some of them in degeneration and some of them in regeneration with increased nuclear mitosis to form frequently giant cells.

MUSCLE & ABSCESS

		148	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165
Abscess Elements	Leucocytic Cells	##	##	÷	+	+	+	+	##	##	##	##	##	##	##	##	##	##
	Lymphocytic Cells	+	+	+	+	+	+	÷	÷	##	##	##	##	##	##	##	##	##
	Histiocytic Cells	##	##	+	+	##	##	+	+	+	+	+	+	+	+	+	+	+
	Fragments of Nuclei	##	##	##	##	##	##	##	##	+	+	÷	##	##	##	##	##	##
	Erythrocyte	##	##	##	##	##	##	##	##	+	+	÷	##	##	##	##	##	##
	Giant cell	-	-	-	-	-	-	-	-	##	+	÷	##	##	##	##	##	##
	Amorphous Substance	acidophilic	-	-	+	+	+	+	-	÷	÷	÷	÷	÷	÷	##	+	-
		basophilic	##	##	##	##	##	+	+	##	÷	÷	÷	÷	÷	##	##	##
	Fibrin		-	-	-	+	+	+	-	-	-	-	-	-	-	##	##	##
	Rest of destroyed Muscle Fiber		÷	÷	+	+	##	##	-	÷	-	-	-	-	-	##	##	##
	Production of Connectiv. Tissue		-	-	-	-	-	-	-	-	##	##	##	##	##	-	-	-
	Muscular Tissue around Abscess Interstitium	Muscle Fiber																
Disappearance of Striations		+	##	##	##	+	##	+	##	+	##	+	##	##	##	##	##	
Coagling		##	##	##	##	##	##	+	##	÷	÷	##	##	##	##	##	##	
Swelling		+	+	##	##	(##)	##	+	##	÷	##	(##)	##	##	##	##	##	
Atrophy		-	÷	÷	÷	(##)	-	÷	÷	##	##	##	##	##	##	##	##	
Hyaline Degeneration		-	+	+	÷	-	+	-	+	-	-	-	-	-	-	-	-	
Waxy Necrosis		÷	÷	÷	÷	-	-	-	÷	-	-	-	-	-	-	-	-	
Cloddy Decay		+	÷	÷	##	÷	÷	+	÷	-	-	-	-	-	-	-	-	
Increase of Nuclei of Muscle Fiber		÷	÷	+	+	+	-	-	-	+	÷	÷	÷	÷	÷	÷	÷	
Edema		-	-	÷	+	+	÷	-	+	+	+	##	+	+	+	+	##	
Hemorrhage		##	##	÷	+	+	##	+	##	-	-	-	##	##	##	##	##	
Contents of Blood vessels		Erythrocytes	##	##	+	+	+	##	##	÷	÷	÷	÷	÷	÷	÷	÷	÷
		Leucocytes	÷	+	-	÷	-	÷	÷	÷	-	-	-	(##)	+	##	##	##
		Lymphocytes	÷	÷	÷	÷	÷	÷	+	÷	(+)	÷	-	÷	÷	÷	÷	÷
		Monocytes	-	+	÷	(##)	##	÷	##	÷	(+)	÷	-	(-)	-	÷	÷	÷
Endothelium of Blood vessels		Swelling	+	+	-	(-)	-	-	-	÷	(-)	-	-	-	-	-	-	-
		Desquamation	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Hyperplasia	÷	÷	÷	(-)	-	-	-	÷	÷	÷	-	-	-	-	-	-
Infiltration of Small Round Cells		÷	+	÷	÷	÷	÷	÷	÷	##	##	##	##	##	##	##	##	
Infiltration of Leucocytes		(##)	(##)	-	÷	-	-	-	÷	##	##	##	##	##	##	##	##	
Prolif. of Fibro-histiocytic Cells		(##)	(##)	-	÷	÷	÷	+	÷	##	##	##	##	##	##	##	##	
Prolif. of Adventitial Cells		+	+	÷	+	÷	÷	##	+	+	+	+	+	+	+	+	+	

[REDACTED]

Muscular abscess with intense
leucocytic-necrotic changes at
perivascular portion.

[REDACTED]



Nr 180.

(x 100)

Diffuse muscular abscess.



Nr 254.

(x 25)

Muscular abscess, accompanied
with hemorrhages in degene-
rated nervaus bundle.



№ 180.

(x160)

~~XXXXXXXXXX~~
~~XXXXXXXXXX~~
Metastatic millet-corn large
muscular abscess.



No 180

(x 60)

Increase of nuclei of muscular cells.

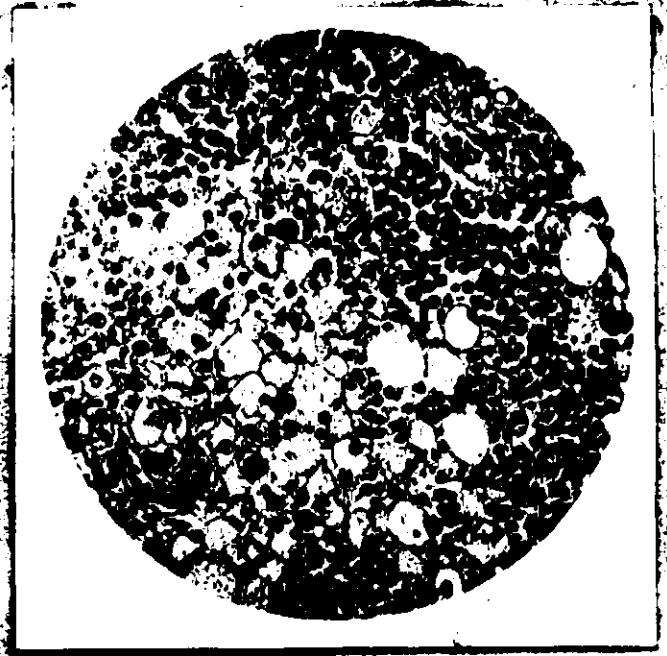


No 180.

(x360)

[REDACTED]

Muscular abscess, accompanied with some increased myoblast and some plasma cells.



No 180

(x 260)

Muscular abscess at the margin portion, accompanied with some increased histiocytes and some giant cells. (reparative process).



No 180

(x 230)

[REDACTED]

[REDACTED]

B R A I N
(A) Microscop. Investigation.

I46.

Meniges : moderate congestion, edema and slight diffuse hemorrhages. Perivascular round-cell-infiltration.

Brain: Moderate congestion and edematous swelling of capillary-walls; slight perivascular edema, slight degeneration of ganglion cells and very slight hyperplasia of glia cells.

I52.

The same, but with more slighter changes than in No. I46-cases.

I67.

Meniges : moderate congestion, edema and slight hemorrhages. Perivascular round-cell-infiltration.

Brain : congestion and very slight hyperplasia of glia cells.

I78.

Meninges: Moderate congestion, edema and perivascular round-cell-infiltration.

Brain: moderate congestion, slight perivascular edema, slight degeneration of ganglion cells and very slight hyperplasia of glia cells.

I90.

Meninges : moderate congestion, edema and slight hemorrhages. Considerable perivascular round-cell-infiltration.

[REDACTED]

[REDACTED]

Brain : moderate congestion and perivascular edema, slight degeneration of ganglion cells and very slight hyperplasia of glia cells.

193. 221. 222.

The same changes as above mentioned, but more slighter.

229. Almost normal. Slight stasis.

727. Almost normal. Slight stasis.

731. Almost normal. Slight stasis.

Cerebellum 229. Almost normal. Slight stasis.

Summary :

[REDACTED]

[REDACTED]

(B) S U M M A R Y.

Meninges : generally slight congestion, slight perivascular edema and sometimes slight hemorrhages.

Brain : generally slight congestion, slight perivascular edema and very slight hyperplasia of glia cells.

[REDACTED]

[REDACTED]

A O R T A.

152.

178.

221.

256.

No remarkable changes.

[REDACTED]

[REDACTED]

T H Y M U S.

(A) Microscop. Investigation.

16.

Generally atrophic lobulus (physiological involution) with considerable decrease of lymphocytes in cortical tissues. Some reticulum-cells fall into necrosis.

Generally Hassall's corpuscles are regressive; many caseous corpuscles and some of them in softening or lithiasis.

Intense edema in medullary and cortical tissues.

85.

Remarkable atrophica of lobulus, resulting in the trabecular arrangements.

Generally with some regressive Hassall's corpuscles (some of them in hyalinous corpuscles).

Some islet-likely regenerated medulla in parenchymatous tissues, consisted of some swollen reticulum-cells.

Thickening of blood-vessels-walls, with some perivascular edema and some epithelioid cells accumulations.

[REDACTED]

P H A R Y N X [REDACTED]

(A) Microscopical. Investigation.

I52.

Slight round-cell-infiltration in mucous tissues and no remarkable changes else.

I78.

Swelling and roughness of all tissues layers, due to intense edema. Deciduous desquamation of epithel cells and some hyalinisation of T. muscularis.

I80.

Slight congestion and slight edema.

Slight round-cell-infiltration along the efferent ducts of glands. No remarkable changes else.

I90.

Slight serous and cellular infiltration in mucous tissues, and roughness of connective tissues.

Some increased lymph-nodulus with germinative centres, esp. along the efferat ducts of glands.

I93.

Some round-cell-infiltration in submucous tissues and invading of some lymphocytes into epitheliums of mucous membrane and glands.

[REDACTED]

[REDACTED]