

ser were remarkably increased. Some part of the mitochondria swelled and its cristae became obscured. The number of the lysosome with a large amount of bile pigment and that of microbody increased. These changes were found most remarkably in PZA group, compared to the findings 1314 TH and PAS groups.

109. AN ELECTRON MICROSCOPIC STUDY OF THE UPTAKE AND EXCRETION OF BILLIGRAFIN BY THE LIVER OF RATS

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Experimentation were carried on adult rats, which were classified as following groups.

- A) Control group
- B) Norethandrolone treated group
- C) Biliary common duct ligated group

As the first step, in A and B group measurement of Billigrafin excretion via bile duct was performed after intravenous administration. Thereafter in group A, B and C, the liver specimen for purpose of electron microscopic review were prepared by means of standard procedure. Also, other type of specimen was made, utilizing methanol-chloroform to remove lipoide substance after glutaraldehyde fixation.

The results were as followed.

In group A comparing with in group B, significant decline of Billigrafin in bile duct was observed. In Kupffer cell, by pinocytosis Billigrafin was taken into lysosome, which was detected from $0.8\sim 2\mu$ in size in group A, while in group B as well as in C, lysosome was larger measured $6\sim 7\mu$ in size. In hepatic cells, the pinocytotic vesicles was prominent in cell membrane, containing some small particles. Most likely, this process was assumed to be ocured by pinocytosis. Some time after Billigrafin granules on lysosome were grouped around the canaliculi.

The results of the experimentation was quite suggestive that the Kupffer cell may regulate the blood Billigrafin concentration. This concentration increased secondary to excretion disturbance.

About the Golgibody and endoplasmic reticulum, we hardly to confirm any role playing on Billigrafin pathway.

110. MICROANGIOGRAPHIC AND ELECTRON MICROSCOPIC OBSERVATIONS OF THE SO-CALLED BANTI'S DISEASE

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Splenoarteriographic, microangiographic and electron microscopic observations were made on the spleens of so-called Banti's disease, congestive splenomegaly, and normal.

On the Banti's disease, the splenoarteriography showed meandering of the splenic artery, narrowing of the trabecular arteries and the photographic timing delayed.

The microangiography showed the narrowing and dilatation of the follicular arteries, meandering of the follicular and penicillar arteries, and increase of the follicules in number and in size.

On the electron microscopic findings, the splenic sinuses increased in number, and cords became narrow, but in some other place, sinuses decreased and cords widened. Reticulum remarkably increased in the cords and capillary wall seemed to be thickened.

These results suggest that fundamental importance in the development of splenomegaly on the so-called Banti's disease may be attached to hemodynamical defects in the splenic vascular system.