

### 103. ALCOHOL AND THE LIVER

T. TAKAHASHI, M. HORIGUCHI, M. YOSHIDA, A. KIYOKAWA, A. ABE, S. NOGUCHI,  
Y. OZAWA, A. TAKAHASHI, J. WATANABE, K. SUGIURA

*1st Dept. Int. Med. Jikei University School of Medicine*

Clinicopathological study was made on the 189 patients of the liver cirrhosis and 22 patients of the fatty liver at diagnosis, by biopsy or necropsy. And in experiments, effects on the damaged liver and relapsing stage of the damaged liver was observed.

#### RESULTS:

1) Age distribution with histologically proven cirrhosis of the liver was in 4th to 5th decades in the highest incidence (58.6%). In our series of the patients 63 per cent gave a past history of alcoholism.

2) In the case of heavy drinker with a past history of hepatitis (Abbreviated as A1 group), the interval between diagnosis and the beginning of alcohol intake was largely in 30 to 40 years of age. In the case with a history of acute hepatitis (Abbreviated as H group), diagnosis of the cirrhosis was made within 3 years from the onset of jaundice.

3) Prognosis of the H group and A1 group after the onset of ascites: The prognosis of A1 group was better than that of H group. The cause of death: In H group mortality from coma was common, and in A1 group the death from gastrointestinal hemorrhage was in the highest incidence. Liver weight was heavier in the A1 group (Average 1220 g.) than that of the H group (Average 820 g.) except the case complicated primary liver carcinoma.

4) Proliferation of the hepatic fibrosis extended from the focal necrosis was plays an important role to the profession of the liver cirrhosis as well as fatty metamorphosis.

5) The fibrosis of the fatty liver was not seem to be established within a short time considering from the case that could follow up during 3.5 years. There was also a case of the fatty liver of which fibrosis appeared after the vanishing of fatty metamorphosis.

6) Intrahepatic circulatory disturbance was one of the most important factor for the progression of the liver cirrhosis considering the following data. a) Arterial hepatic bed increased in the fatty liver. b) Fatty droplet appears in the vicinity of the central vein at first, and vanishes from the portal area. c) In the laboratory exam, BSP retention time was retarded.

### 104. STUDIES OF THE EFFECTS OF ALCOHOL UPON THE LIVER (III) THE EFFECTS OF LONG-TERM ADMINISTRATION OF ALCOHOL UPON DEVELOPMENT OF FATTY CIRRHOSIS IN CHOLINE-DEFICIENT RATS

J. TAKEUCHI, A. TAKADA, N. OHARA, G. SAWAE, Y. OKUMURA

*The First Department of Internal Medicine, School of Medicine,  
Kanazawa University, Kanazawa, Japan*

#### Abstract

In spite of numerous investigations, it is still obscure whether alcohol can produce liver cirrhosis by its own action or combination of the other factors. In this paper, the effect of long-term administration of alcohol upon development of fatty cirrhosis in choline-deficient rats was studied.

Four groups of rats, which were choline-deficient, choline-deficient alcohol-treated, choline-supplemented and choline-supplemented alcohol-treated rats, were sacrificed at the different intervals during 5~6 months of the experimental period. The changes in the liver and serum of each group were evaluated histologically and biochemically.

Ninety percent of choline-deficient rats showed liver cirrhosis within 6 months of the experiment. On the other hand, only minimal fatty changes in the liver were observed in the choline-supplemented group throughout the experiment.

Choline-deficient alcohol-treated rats showed moderate fibrosis of the liver during 5 months