B-14. THE PROGNOSIS AND PATENCY OF ANASTOMOSIS OF THE PORTAL DECOMPRESSION

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Studied cases were those admitted to our hospital for the past 7 years and were inclusive of 27 cases of portal hypertension (livercirrhosis 13; Banti's syndrom 11; the others 3) to which the shunt operations were performed. The kind of operations were 4 of Eck's operation, 16 of splenorenal vein anastomosis and 7 of superior mesenteric vein—V. cava anastomosis.

Operative death were none in non-cirrhotic group and 15.4% (2/13) in cirrhotic group. Follow up study revealed that survival rate of non-cirrhotic group was 93% and that of cirrhotic group was 80%. Hematoemesis and ascites were improved by operation in most of the cases. Remission rate of esophageal varices was 71%. Postoperative blood study and liver function tests were performed, revealing no tendency of the progress of the disease. Moreover, some tests indicated the improvement. None showed the abnormal increase of blood ammonia, and only one hepatic coma was observed postoperatively. Rehabilitation rate among the survived cases were 81%.

Simple and reproduciable method is desirable to evaluate the patency of the anastomosis. Therefore, phenoxyethly penicillin was administered orally to the dogs to which the shunt operations were performed, and the pre- and postoperative blood penicillin level were measured. Early appearance of high concentration of serum penicillin was characteristic of the successful case.

We utilized this principle clinically, however, there was a discrepancy between the clinical and laboratory findings and blood penicillin level. Further study is indicated to rule out the participation of other factor in this study.

B-15. SEPARATIVE MEASUREMENT OF BLOOD FLOW ON PORTAL VEIN AND HEPATIC ARTERY:—EXPERIMENTAL STUDY

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Intrahepatic portal venous blockade consists of 2 types, cirrhotic and non-cirrhotic portal hypertension. This experiment was carried to clarify the fact that the ratio between portal venous blood and hepatic arterial blood was changeble depending upon the position where the ablation of blood flow exists.

Group 1: cirrhotic liver, oral feeding of CCl_4 for 10 months.
Group 2: intrahepatic portal vein obstruction: daily administrations of 1% of methyl cellulose solution for 3 weeks.

Both groups were submitted to separative measurement of portal venous and hepatic arterial flow. Cr 51 labeled red cell was used as indicator.

Percentage of portal blood per total hepatic blood were following.

Group 1: 54.8……46.9% (average 51.7%)
Group 2: 47.5……33.1% (average 40.5%)
Control: 76.5……64.6% (average 70.7%)

In comparision with the control, both experimental groups showed decrease of portal flow. Hepatic flow were studied on these groups by Au^{198}.

The flow of Group 1 is down to 73% of the control, but not in Group 2.

Diminution of the flow in Group 1 is reflected upon portal flow. This suggests that the compensatory increase of flow of hepatic artery is not dominant, but the decrease of portal flow is supplemented by increase of hepatic artery.

Total hepatic flow is no change. Ratio between portal & hepatic arterial flow are in reverse. These facts suggest that flow disturbance due to strong cell distruction appears in the cirrhotic

liver and block portal venous and hepatic arterial flow. On the other hand, when parenchymal distorsion is strong, the influence occurs in presinusoid in portal venous bed and easily compensats by arterial flow. We believe, these findings clarify the pathogenesis of 2 types of intrahepatic portal hypertension in Japan.

B-16. SURGICAL TREATMENT OF ALVEOLAR ECHINOCOCCOSIS OF THE LIVER

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In Japan, Alveolar Echinococcosis of the Liver has been admitted to be only endemic in the Rebunto Island, Hokkaido although Nemuro province is now in discussion as the infected area.

Its clinical manifestations are variant in accordance with the clinical stage and many therapeutical problems remain to be solved.

The present study was designed to analyze clinical data and to discuss the surgical indication, based upon our 24 cases.

The cases included 15 males and 9 females. The age distribution was ranged from 54 to 7 but clinical manifestations appeared more frequently between 30 and 40 years of age.

The diagnosis was established by the similiar methods employed in other liver tumors. Eosiophilia, intrahepatic calcification and so on were observed in some of the cases. Hepatic scintiscannings and angiographies commonly revealed characteristic uptake or filling defect at the lesion.

Jaundice may develop when the lesion existed in hepatic hilum but there were not a few cases which required surgical biopsy or exploratory laparotomy for the final diagnosis. Serum Compliment Fixation Test were usually most effective in determining the diagnosis.

In this series, the massive hepatectomy was performed in 16 cases, hepato jejunostomy for bile duct reconstruction in 2, and exploratory laparotomy in 6.

Five year survival in 16 hepatectomized cases was 31 per cent (5 cases), while inoperable 8 cases 3 died within one year and 5 within five years.

Conclusion: Pharmacological therapy is now being applied clinically for the disease without definite effectiveness. Although jaundised patients may have still the opportunity to undergo bile duct reconstruction it is conceivable at least at the present time that an early diagnosis and radically massive hepatectomy is the most reliable treatment.

B-17. EXPERIENCE WITE THE LIGATION OF THE RIGHT PORTAL BRANCH FOR THE HUGE HEMANGIOMA OF THE RIGHT LOBE OF THE LIVER

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A huge hemangioma of the right lobe of the liver treated by a new operative method was reported.

A women, aged 38 years, was admitted with a history of dull pain in the right hypochondrial region, general malaise, intermittent fever, perspiration and occasional nausea for two years duration.

She was diagnosed as the hemangioma of the liver preoperatively.

On operative table, a huge compressible hemangioma of the right lobe of the liver was noted, and the right branch of the portal vein was ligated without any risk.

This procedure led to a progressive atrophy of the liver parenchyma in the occluded side of