1) Histalog: GAP tented to increase during 20~40 minutes after the administration in spite of initial trancient fall. The remarkable increase of the GBF and GSR were simultaneously observed.

2) Gastrin: A fall of GAP and increase of GSR were inspected similar to those of Histalog, but GBF was variable and gastric venous pressure was slightly elevated.

3) In both agents, GCT was delayed by about 20 percent. No remarkable changes were revealed in the hepatic hemodynamics after the administration of these drugs with the exception of slight increase of HBF by Gastrin.

Observation in rats;

The dilation of capillaries in the gastric mucosa and serosa were observed after the administration of both Histalog and Gastrin. The dilation of vessels of intestine and liver were showed by Histalog, while the constriction was induced by Gastrin.

Histalog increase propably the volume of gastric blood flow as the results of reduction of splanchinic vascular resistance and Gastrin may work on the increase of gastric mucosal blood flow rather than total blood flow.

134. HEMODYNAMIC STUDIES ON EXPERIMENTAL HIGH INFLOW PORTAL HYPERTENSION

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To study on the experimental hemodynamics of high inflow portal hypertension, the renal artery was inplannted to the tissue of spleen in one group and the renal artery was anastomosed to the portal vein in another group, and then observed the splenic and hepatic blood flow by ^{85}Kr clearance technique.

1) Splenic blood flow (splenic artery clearance) resulted 61.8 ± 16.4 ml/min/100 g and hepatic blood flow (portal vein clearance) showed 142.8 ± 19.4 ml/min/100 g in normal dogs.

2) The dogs which the renal artery inplannted to the spleen, splenic blood flow increased to 43.5% compared with normal dogs but hepatic blood flow and portal pressure fluctuated in normal values.

3) The dogs which the renal artery anastomosed to the portal vein resulted the same with in normal dogs, but the hepatic blood flow increased to 2.5 times high and the portal pressure also increased to 2 times high than pre-operative value at 297.5 ± 60.6 mmH_2O, and WHVP increased to 2.5 times at 265.0 ± 61.8 mmH_2O. It seemed that the portal pressure had much response to portal blood flow.

135. DIAGNOSTIC SIGNIFICANCE OF ALDOLASE ISOZYME IN GASTROINTESTINAL DISEASES

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Determinations of aldolase isozyme in serum and tissue revealed the following results:

1) FDP/FIP was about 2.6 in healthy human serum. It was 9.3 and 10.4 in the sera of cases of gastric cancer and hepatic cancer respectively, following a study with 167 cases of gastrointestinal diseases. It was in a normal range in cases with non-cancerous diseases.

2) FDP/FIP in hepatic tissue was 13.7 and 1.4~1.9 in cases of hepatic cancer and non-cancerous diseases, respectively, revealed in 31 autopsy cases. It was 8.5 in an 8-month premature baby.

3) FDP/FIP in the serum of rats with hepatic disturbances due to CCl_4 and common bile duct ligation was 1.2~2.0. It was 5.1 and 7.1 in regenerated liver two days and 7 days after liver resection respectively. It was 10.3 in Yoshida ascites sarcoma 7 days after transplantation,