CLINICAL SIGNIFICANCE OF DUAL RADIONUCLIDE STUDIES ON THE EVALUATION OF BILIARY RECONSTRUCTION.


Seventy-eight patients suffered from the operative reconstruction of biliary tract, with hepatobiliary tract diseases, were examined on the postoperative conditions. These patients consisted of 22 of cholelithiasis, 22 of bile duct cancer, 11 of pancreas cancer, 8 of congenital choledochal cyst and 15 of other diseases.

To the patients with malignant biliary tract diseases, the pancreatoduodenectomy had been performed with three different operation methods: Child's modification(9), Whipple's modification(15), and Cattell's modification(9). For scintigraphic evaluation of these operation methods, the dual radionuclide scan was used. The results showed that whipple's and Cattell's modifications were significantly superior to Child's modification, but not between Whipple's and Cattell's modifications.

This dual radionuclide technique appears to be a current method of choice for the evaluation of operative reconstruction of the biliary tract, through analyses of bile flow and its transition into small bowel, the state of gastric emptying, and the manner of synchronization of bile and meal movements.

SCINTIGRAPHIC DEMONSTRATION OF ACUTE GASTRO-INTESTINAL (GI) BLEEDING IN FOUR CASES

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The localization of the site of GI bleeding is a difficult problem even with upper GI series, endoscopy and angiography. Four cases with acute lower GI bleeding are presented. (Case 1) 30 y.o. Male. An upper GI series and endoscopic examination failed to detect bleeding site. Serial images with Tc-99m pertechnetate revealed abnormal activity in lower abdomen suggesting ectopic gastric mucosa. In this case the operation was performed and duplication of ileum was removed. (Case 2) 45y.o. Female. The diagnosis of multiple A-V malformations was made by angiography, but the bleeding site was unclear. Tc-99m RBC study revealed bleeding site in sigmoid colon. (Case 3) 64y.o. Male. An upper GI series showed diverticulum in small intestine and Meckel's diverticulum was suspected, but Tc-99m pertechnetate study suggested hypervascular lesion. Operation was performed and leiomyosarcoma of ileum was resected. (Case 4) 64y.o. Male. Endoscopic examination failed to detect bleeding site and Tc-99m RBC study revealed massive bleeding from sigmoid colon. In this case ischemic colitis of sigmoid colon was confirmed by lapalotomy. In acute GI bleeding it is necessary to make precise diagnosis and to detect the bleeding site. Scintigraphic examination is not invasive and sometimes efficacious when other examinations are negative.