M. Gastrointestinal System (including Pancreas)


Ultrasonography was performed in conjunction with pancreas scintigraphy in sixty-three patients. In the radionuclide study, both pancreas image with Se-75 selenomethionine and gastrointestinal image with Tc-99m pertechnetate were obtained to check the location of the pancreas head. True positive rate of the radionuclide, ultrasound and combined study was 95%, 88%, and 98% respectively. True negative rate was 75%, 92%, and 100%, and overall accuracy was 86%, 90%, and 98% respectively. The false-positive rate with our combined study was clearly diminished. For instance, the area of decreased radioactivity was visualized in four normal pancreas body. It was difficult to distinguish a tumor of the pancreas body from the physiological thinness. However, the thinness of the pancreas body was easily confirmed by the ultrasonography. On the other hand, ultrasound revealed slightly enlarged pancreas head in two normal cases. In these cases, increased radioactivity at the pancreas head was demonstrated corresponding to the sonographic enlargement. In conclusion, the diagnostic reliability of the combined study was excellent because of its low false-positive rate.

SCINTIGRAPHIC EVALUATION OF PANCREATIC INVASION OF STOMACH CANCER. N.Yui, F.Kinoshita and M.Koakutsu. Chiba Cancer Center Hospital, Chiba.

In one hundred and fifty-one patients with stomach cancers, pancreatic scintographies were performed preoperatively in order to investigate possibility of diagnosis of pancreatic invasion. Eleven out of 13 patients, who were confirmed pancreatic invasion operatively, had shown abnormal scintigrams, but only 8 of them had been suspected to be invasive scintigraphically. Ninety-two out of 138 normal pancreases showed normal scintigraphic findings and remainings presented abnormal findings, i.e. false positives. Normal scintigram may be considered to show normal pancreas, but abnormal scintigram is not always indicative abnormal pancreas including invasion and further examinations are necessary for more accurate diagnosis.

SCINTIGRAPHIC DETECTION OF CHRONIC SMALL BOWEL BLEEDING. T.Nakai, S.Matsumoto, T.Hidaka, S.Murakami, K.Hamada and H.Ochi. Department of Radiology, Nissel Hospital and Osaka City University Medical School, Osaka.

Two cases of small bowel bleeding were detected by delayed abdominal scintigraphy with Tc-99m-HSA. Case one is 29 years old male with anemia and melena. The upper G-I series and barium enema were negative. Serial scintigraphy was performed in the anterior position using a large field scinticamera after intravenous administration of Tc-99m-HSA(20mCi). The initial scintigrams were negative, but at 20 hours and 24 hours, the scan became positive in the terminal ileum, cecum and ascending colon. At surgery, the bleeding point of the myoma with ulcer in the terminal ileum was seen along with fresh blood clots in the cecum and ascending colon. Case two was 53 years old male with anemia. Serial scintigraphy was performed with the same method. The scintigram at 1, 3, 5 hours were negative. At 24 hours, the scan became positive in the ileum, ascending colon and transverse colon. At surgery, bleeding adenocarcinoma was found in the jejunum. The gastrointestinal radio-graphics were negative in this case, too. Delayed scintigraphy with Tc-99m-HSA could be useful technique to detect chronic gastrointestinal bleeding.