I. Gastrointestinal Tract, Liver, RES, and Pancreas

Clinical Application of Scinticamera, 3rd Report Pancreatic Disease

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Scinticamera of the pancreas using ⁷⁵Semethionine was performed in 167 patients with presumed pancreatic carcinoma.

We grouped scintiphotos under "Normal Pattern" "Shadow defect" and "Poor or No uptake" and studied their correlation to diagnosis.

Results obtained were as follows:

- (1) "Normal Pattern" is demonstrated in 125 patients, one of whom was shown to have cancer of the pancreas, 3 pancreatitis and 121 normal.
- (2) "Shadow defect" is demonstrated in 17 patients, 13 of whom were diagnosed as pancreatic cancer by surgery, and 4 undetermined.
 - (3) "Poor or No uptake" is demonstrated

in 12 patients, one of whom was diagnosed as pancreatic cancer clinically, 2 as pancreatitis and 9 as normal.

- (4) 3 cases receiving irradiation to the upper abdominal tumor, 5 cases receiving pancreatico-duodenotomy combined with gastrectomy showed also "Poor or No uptake", besides 5 cases of large liver tumor which overshadowed the pancreas.
- (5) Scintiphotos of all pancreatic carcinoma were shown and classified regarding to the locus of the lesion.
- (6) Some interesting cases of pseudomyxoma peritonei, leiomyosarcoma of the gall bladder and gastric tumor were shown, in which the pancrease was displaced remarkably.

Experimental Studies in Pancreas Scanning using 131I-Rose Bengal

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A new method of pancreas scanning is described, in which the liver image is eliminated by the intraperitoneal injection of ¹³¹I-Erythrosine B (¹³¹I-Iodeosine B) or ¹³¹I-Rose Bengal.

In the investigation using rats, we verified that the labelled Rose Bengal administered intraperitoneally is concentrated by the pancreas.

Intraperitoneal injection of Esberiven (Melilotosid) increased the pancreatic uptake,

and intravenous injection of Esberiven and intraperitoneal injection of Gascon (Dimethylpolysiloxane) fastened the absorption.

The patient is injected intraperitoneally with 300 μ Ci of labeled Rose Bengal, we obtained the pancreas scintigram 50 to 90 minutes after injection.

⁷⁵Se-selenomethionine is concentrated in the pancreas and liver, the Rose Bengal is in only the pancreas.