

## I) Digestive Organ (GI Tract and Pancreas)

### The Differentiation of Carcinoma of the Pancreas from Chronic Pancreatitis in Scintigraphy

G. UCHIYAMA, Y. KUNYASU, H. KAKEHI and Y. MATSUURA

*Department of Radiology, Chiba University School of Medicine, Chiba*

The specific patterns of the carcinoma of the pancreas were extracted in the previous report from analytical reviews of more than 100 pancreatic scintigrams. The localized defects in the pancreas images, faint or no visualizations of the pancreas were the signs of the carcinoma of the pancreas in X-rays, or by the pancreozymin secretin tests, were analyzed recently, and the variations from normal images of pancreas to faint or non-visualized pancreas were specified.

The pancreas images of 30 cases with carcinoma and 20 cases with chronic pancreatitis were schematized and compared in detail in this report. 1) apparent defect with normal shape and density in the rest part of the pancreas mostly suggests the carcinoma. This sign is frequently seen in the carcinoma of the body and/or tail of the pancreas. 2) Round spot of radioisotope accumulation in the region of head of the pan-

creas with no visualization of whole pancreas frequently suggests the carcinoma. This sign is common to the carcinoma of the head of the pancreas and is uncommon to the chronic pancreatitis. 3) Partial, faint, or no visualization of the whole pancreas suggests both carcinoma and chronic pancreatitis. This sign is common to the carcinoma in the head of the pancreas or in the whole pancreas, and the well established chronic pancreatitis accompanied by the calcification in the pancreas tissue and/or by the secondary induced diabetes mellitus. No differentiation between carcinoma and pancreatitis could be possible in such a case. 4) Faint but well outlined pancreas may suggest the chronic pancreatitis.

Not only for the screening test, the pancreatic scintigraphy could also be useful for the differentiation of the carcinoma with other pancreatic diseases.

### The Clinical Significance of Pancreas Scintigraphy in Diagnosis of Pancreas disease

T. SASAKI

*Department of Radiology Nagoya University Hospital, Nagoya*

C. KIDO and K. SAKURAI

*Radiodiagnostic Department Aichi Cancer Center Hospital, Nagoya*

M. KANEKO

*Department of Radiology Nagoya University Branch Hospital, Nagoya*

Pancreas scintigraphy was performed in 659 cases during a period of 1966 to 1972. The cases subjected to study were 138 cases of pancreatic

diseases—pancreas cancer 65, chronic pancreatitis 64, pancreas cyst 7, benign pancreas tumour 4 and others— and 521 cases of non-