An Evaluation Of Pancreatic Scanning Compared With Endoscopic Retrograde Cholangio-pancreatography(ERCP)

Schoiti Horita*, Schoji Ishi,*
Yogen Tsukakoshi,* Tohru Yaosaka,*
Toshihiro Suga,* Kimiaki Miwa,*
Yoshio Murashima,*
Junichi Suzuki,** Sadahiro Wakabayashi,**
Takayuki Nakamura,**
* Sapporo Kosei Hospital, Department of Gastroentrology
** Sapporo Tonan Hospital, Department of Radiology

Various approaches to radiographic examination of the pancreas are available, and for screening test, hitherto pancreatic scanning has been in wide use. Recently endoscopic retrograde cholangio-pancreatography, ERCP, has been adopted. In the present paper we have run a comparison on cases of pancreatic disease between the findings of pancreatic scanning and the results of ERCP. 187 cases may be broken down to 16 cases of pancreas Ca, 100 cases of chronic pancreatitis, 18 cases of cholelithiasis and 53 other cases.

In conclusion it can be said that pancreatic scanning shows the function and morphology of the pancreas while ERCP shows the morphological aspects of the pancreatic duct and it was noted that the findings of both methods showed a high correlation.

It may also be added that pancreatic scanning while having various problematic points, and while differential diagnosis of chronic pancreatitis and pancreas Ca is difficult in some cases, as far as advanced pancreatitis and pancreas Ca are concerned all cases showed abnormal.

Summarizing the above, it may be said that pancreatic scanning is highly significant as a screening test.

INVESTIGATION OF ^{99m}Tc SCAN AND ^{67}Ga SCAN FOR PAROTID TUMORS.

Yaeko Takagi, Atsushi Kubo, Shigeru Kosuda, Makoto Kondoh, Shohzoh Hashimoto, Yasushi Murakami, and Shigenori Haraguchi.
School of Medicine, Keio University Tokyo.

The purpose of this study is to determine the accuracy and reliability of scintiscan techniques in the differential diagnosis of parotid tumors.

We experienced 76 patients with proven abnormalities of the parotid glands. Fifty-three patients of them received both ^{99m}Tc scan and ^{67}Ga scan, including 21 cases of benign tumors, 6 malignant tumors and 16 inflammatory masses.

The parotid scan abnormalities which may be of diagnostic value are asymmetrical parotid images, increased ^{99m}Tc concentration, defect in parotid images in ^{99m}Tc scan and high accumulation in ^{67}Ga scan. Asymmetries of the parotid images were found more than half of all cases. Increased ^{99m}Tc concentration were observed in two cases of three Warthin's tumors.

We proposed three types according to appearance of the latter two abnormal findings in ^{99m}Tc scan and ^{67}Ga scan. Type B; showing defect on ^{99m}Ic scan and no Ga accumulation on ^{67}Ga scan. Type M; showing defect on ^{99m}Tc scan and increased Ga accumulation on ^{67}Ga scan. Type I; showing no defect on ^{99m}Tc scan and increased Ga accumulation on ^{67}Ga scan. Each type of the scan data was correlated with the clinical, surgical and histological findings as follows: type B with benign tumors; positive 57%, negative 100%, false-negative 43%, and false-positive 0%, type M with malignant tumors; positive 100%, negative 87%, false-negative 0%, and false-positive 13%, type I, with inflammatory masses; positive 50%, negative 86%, false-negative 50%, and false-positive 14%. There were 7 false-positive cases of type M, including 5 benign mixed tumors. One of them was in post-irradiation state, one was observed severe inflammatory change surrounding the main tumor at operation, Two had received contrast sialography and one had received biopsy before the scan.

We could not make any decision about the nature of the parotid tumors with ^{99m}Tc scan alone. By using both ^{99m}Tc scan and ^{67}Ga scan, however, we could detect the location and size of the tumors, and also could make crude differential diagnosis of the tumors.