HEPATIC UPTAKE MEASUREMENT OF Tc-99m-PMT BY SPECT AND ITS FUNCTIONAL IMAGE. K.Nakamura, H.Maeda, T.Hirano, T.Kitano and T.Nakagawa. Department of Radiology, Mie University, Tsu, Japan

Hepatic uptake of Tc-99m-PMT was measured by SPECT at 4-5 min. after bolus injection. Scan time was 1 min. and SPECT image was constructed by convolution method and corrected by Chang's method of attenuation correction. The value of liver background activity was determined as 0.812 $(\text{pixel})/0.85$. This was obtained from SPECT image of Tc-99m-human serum albumin, because liver background activity was influenced by its organ vascularity and blood pool. Total liver uptake was calculated as total liver counts/total dose counts. Mean uptake was measured by (counts over each pixel of the liver) $(\text{pixel})/0.85$. The uptake image could give the liver function/volume and was clinically usefull.

SCINTIGRAPHIC STUDY ON INTRAHEPATIC BILIARY EXCRETION. T.Mori, K.Kono, K.Nishizawa. Hirosaki University School of Medicine, Hirosaki.

The intrahepatic bile excretion mechanism was studied on 40 normal subjects by hepatobiliary scintigrams. After overnight fasting, each subject was injected with 2 mCi of Tc-99m-EHIDA intravenously and 15 were further injected with CCK-PZ after 30 min. Analog images were acquired at every 5 min during 60 min. The radioactivity was measured through the detector connected with computer, at 1 frame/10sec and dynamic curve and cps were recorded at 4 region of interest; bilat. intrahepatic bile duct, bilat. hepatic parenchyma. Results obtained as summarized as follows. Bilat. intrahepatic duct got visualized by 10 min. The intensity of image at rt. hepatic duct was more prominent than those at rt. hepatic duct in 80% of the subjects. Peak time and half-life of the dynamic curve at rt. side parenchyma were same as those of rt. side. However, peak time at rt. hepatic duct delayed with statistically significant compared that of rt. side. Residual RI activity of rt. hepatic duct was higher than that of rt. hepatic duct at the parenchymal half-life time. CCK was observed that to prompt the excretion of the hepatic bile.