

these circulatory disturbance.

## **Diagnosis of Hepatobiliary Diseases Using $^{131}\text{I}$ -BSP Retention Ratio (20min/5min) and Scintigraphy**

K. UENO, T. ABURANO, Y. SUZUKI, and K. HISADA

*Dept. of Nuclear Medicine, School of Medicine, Kanazawa Univ., Kanazawa*

In order to get a better diagnostic criteria of jaundices, we examined 51 cases (10 cases; normal, 17; acute and chronic hepatic diseases, 5; cholangiolytic hepatitis, 1; primary billiary cirrhosis, 18; billiary tract diseases) using  $^{131}\text{I}$ -BSP blood retention ratio (20min/5min) and serial hepatobiliary scintigraphy. After intravenous injection of  $^{131}\text{I}$ -BSP 100  $\mu\text{Ci}$ , serial hepatobiliary imagings were obtained at 5, 10, 30, 60, 120, 240 min, 24 hrs, ..... post I.V., and 1 ml of venous blood was drawa at 5, 10, 20 min post I.V., and blood ratention ratio (20min/5min) were calculated.

Results;  $^{131}\text{I}$ -BSP blood retention ratio (20min/5min) of various hepatobiliary diseases were  $20.9 \pm 6.9\%$  in normal cases,  $27.5 \pm 14.9\%$  in nonicteric hepatocellular disorder,  $68.9 \pm 18.8\%$  in icteric hepatocellular disorder,  $61.3 \pm 25.1\%$  in intrahepatic cholestasis,  $20.9 \pm 6.0\%$  in nonicteric extrahepatic bile duct diseases,  $50.9 \pm 20.1\%$  in icteric extra-

hepatic billiary diseases.

$^{131}\text{I}$ -BSP blood retention ratio and serial hepatobiliary scintigraphy were compared with clinical data, and we summarized the diagnostic criteria for the differentiation of hepatobiliary diseases as follows.

If blood retention ratio is over 85%, or 70—85% with excretion into gut on scintigram, it is diagnosed as medical jaundice.

A blood retention ratio between 70—85% without scan evidenee of isotope intestinal excretion indicates extrahepatic complete obstructive jaundice. A blood retention ratio under 40% with delayed isotope excretion into gut suggests extrahepatic bile duct disease, and blood etention ratio under 40% without delayed intestinal excretion is considered to be normal.

When blood retention ratio between 40—70%, it is impossible to differentiate whether it is a medical jaundice or not.

## **Tumor Scanning with Co-57-Bleomycin in the Carcinoma of the Liver and Pancreas**

S. NAKANO and Y. HASEGAWA

*The Center for Adult Diseases, Osaka*

S. ISHIGAMI

*Department Internal Medicine, Research Institute for Microbial Diseases, Osaka*

Tumor scintigram using Co-57-Bleomycin

has been studied with hepatic and pancreatic