

creas, 1/2 (50%) respectively. In our series of 92 cases, 16 cases (17.4%) were diagnosed the occurrence of liver metastases. Three out of 16 cases proved to be false positive during surgery. Of 76 cases who had been classified as normal liver group, 5.3% (4 cases) proved to be false negative. All of the latter patients had many liver metastases in the size of up to 2 cm. The accuracy of preoperative RI-diagnosis of the occurrence of liver metastases became apparent during the operation and/or autopsy. For liver imaging, the gamma camera has many advantages over the liver scanner. However, there is difficulty in interpreting the space occupying lesions in the size of under 2 cm. A calculation of CEA values should be performed

as a supplementary test in such occasion. All of the four patients who had small liver metastases (false negative cases) showed a significantly higher levels of CEA. To know preoperative liver status of patients with gastrointestinal cancer is important.

Actually, preoperative or postoperative liver scintigraphy using scinticamera in patients with gastrointestinal malignancy is becoming more important in the surgical approach to the primary malignant lesion or recurrent malignant tumor. When liver scintigraphy was initially introduced in patients with gastrointestinal cancer, there was considerable merits concerning an efficacy in the surgical treatment.

^{99m}Tc-Sn-Colloid Liver Scanning in the Patients with Diffuse Hepatic Disease

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^{99m}Tc-Sn-colloid liver scanning was performed in 169 patients with diffuse hepatic disease diagnosed by liver biopsy. Histological diagnosis were as follows, liver cirrhosis: 21, fatty liver: 21, acute hepatitis: 47, prolonged hepatitis: 12, chronic active hepatitis: 59, chronic inactive hepatitis: 9. As to the size of the liver measured in the scan, 38% of the patients was normal in liver cirrhosis but in the other disorders, as many as 56–70% was normal. Splenomegaly was seen in 38% of the patients with liver cirrhosis, but was seen in only 5–11% of the patients with the other disorders. Increased RI activity of the spleen was seen in

66% of the patients with liver cirrhosis, but was seen in only 11–22% of the patients with the other disorders. Appearance of the bone marrow was more common in the liver cirrhosis than in the other disorders. Not only the liver findings but also the spleen and bone marrow findings were negative in 14% of the patients with liver cirrhosis. On the contrary, as many as 44–52% of the patients with the other disorders were negative about the liver, spleen and bone marrow findings. Within the diffuse hepatic disease except for liver cirrhosis, there was no particular difference in the scan findings.

Computer Differential Diagnosis of Diffuse Liver Disease based on Findings of ^{99m}Tc-Sn Colloid Liver Scintigram

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Using 51 liver scintigrams of diffuse liver disease, which were diagnosed by biopsy, differential

diagnosis was tried utilizing BMD program of FACOM 230–38. We made a program with which