recrystalization was repeated several times and obtained bilirubin-3H with speficic ac-

tivity of Ca  $24\mu c/mg$ .

## Visualization of the Spleen in Liver Scaning

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Visualization of the spleen has been an accidental finding in liver scan. We are of the opinion that visualization of the spleen is related to the function of liver RES, and this report deals with the frequency of visualization of the spleen in various diseases. The color multiscintigraphy of the multiscintigram system has been used and 235 scintigrams taken from 204 patients were analyzed. The visualization occurred in 7 (30.0%) out of 23 patients with acute hepatitis, 7 (22.6%) of 3 with chronic hepatitis, 24 (70.5%) of 34 cirrhotics, 7 (77.8%) of 9 with chronic schistosomiasis, 18 (72.0%) of 25 with primary liver cancer, 2 (11.2%) of 18 with secondary liver cancer, 2 (100%) of 2 with the aBnti's syndrome, and 5 (14.5%) of 35 with other diseases. In 63 (51.6%) out of 122 patients with liver disease the spleen was visualized, and only 9 (16.3%) out of 55 with nonhepatic diserders.

The degree of visualization was (+) in

most of the patients with acute hepatitis,  $(+) \sim (\#)$  in chronic hepatitis,  $(+) \sim (\#)$  in cirrhotics, and (#) in primary liver cancer. All those who had liver disorders and a palpable spleen showed positive spleen, suggesting increase RES function of the spleen, whereas in 4 patients with leukemia and malignant lymphoma, the spleen was negative.

No direct correlation was seen between the degree of visualization of the spleen and the liver function tests, except for a relative correlation with the decrease of albumin and A/G.

When the accumulation of <sup>189</sup>Au over the liver and the spleen was studied with regard to time after administration, to evaluate the phagocytic activity of these organs, a trend was noted that with increasing severity of liver fibrosis the splenic curve becomes somewhat similar to the hepatic curve.

## Splenic Scanning by 197Hg MHP Treated Red Cells

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In spite of the growing importance of the radioisotope organ scanning for the clinical diagnosis, satisfactory radiopharmaceuticals for the splenic scanning was not yet available so far in Japan.

According to the report made by Dr. H. N. Wagner et al., we have evaluated the method to prepare <sup>197</sup>Hg labelled 1-mercuri-2-hydro-oxypropane (MHP) and the application of this material for the splenic scanning. Results