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PATTERN CHARACTERIZATION OF HEPATIC SCINTIGRAM IN DIFFUSE HEPATIC DISEASE. K.Kurono, T.Tamaki, A.Iida, M.Matsuo and M.Kono. Nagoya City University, Aichi. T.Inoue. Kobe Ekisaiikai Hospital, Hyogo.

The purpose of this study is evaluation of differential diagnosis of diffuse hepatic disease based on the objective and reproductive indices of hepatic scintigram which are extracted by computer processing. Hepatic scintigraphy of twenty-nine cases which were already diagnosed pathologically by biopsy, were performed. Several objective and reproductive indices of the hepatic scintigram are extracted by computer processing with or without personal subtle deviation of criteria. Based on the results of the classification of all samples by using these indices without personal deviation, 23 of 29 (79.31%) are accurately diagnosed and using all indices, 29 of 29 (100.0%) are accurately diagnosed. The cases are not much of a number, however, this result suggests that the differential diagnosis of diffuse hepatic disease by hepatic scintigram is possible by using the indices and that automated computer diagnosis of diffuse hepatic disease is enabled by programing for the extraction of these indices from hepatic scintigram.

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DIAGNOSTIC VALUE OF LIVER SCINTIGRAPHY IN SEVERE ACUTE HEPATITIS. N.Ikeoka, S.Shiomi, S.Harihara, T.Kuroki, S.Yamamoto, Y.Shimonishi, H.Ikeda, K.Hamada, H.Ochi, Y.Onoyama and T.Monna. Osaka City University Medical School, Osaka.

Liver scintigraphy was performed in 20 cases with severe acute hepatitis and in 44 cases with acute hepatitis. Scintiphotos of severe hepatitis showed reduction of liver size, marked visualization of bone marrow and the spleen, so this pattern was useful to differentiate from acute hepatitis. Relative size of the liver calculated by A.L.I. (anterior liver index) showed significant reduction in severe hepatitis compared with that of acute hepatitis.

All of 15 live patients with severe acute hepatitis, A.L.I. recovered to normal range within 2 months after diagnosis. Bone marrow was invisualized within 6 months after diagnosis in 9 out of 15 patients. Whereas, splenomegaly was showed on 6 months after diagnosis in 9 out of 15 patients.

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CLINICAL USEFULNESS OF INTEGRATED RADIO-NUCLIDE LIVER ANGIOGRAM AND ECT TO EVALUATE DIFFUSE HEPATIC DISEASE. S.Kobayashi, K.Higashi, M.Ooguchi, T.Okimura, T.Miyamura, I.Yamamoto. Kanazawa Medical College, Uchinada.

The procedure of integrated radionuclide liver angiogram was reported by us in a previous meeting of this society. We proposed the clinical usefulness of this method in evaluating diffuse hepatic disease. In this presentation, a quantitative study of this method and ECT with Tc-99m phytate was examined. The count ratio between lungs and livers in integrated radionuclide liver angiogram (P/L) was measured. This count ratio (P/L) correlated well with the ICG retention rate for 15min ($r=0.83$). We conclude that this method is useful in measuring effective liver blood flow.

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DISTURFANCE AND RECOVERY AFTER FOCAL HEPATIC IRRADIATION.

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The liver of rabbit was focally irradiated to the left lobe with 40Gy. Radiocolloid scintigram and hepatobiliary scintigram were performed contigiously after irradiation and the picture data was concurrently collected to dataprocessor.

The daters were compaired quantitively with the profile image, hepatogram and other functional images.

As the results, radiocolloid uptake of the focus are decreased in a first week and transiently increased in a few days, then turned to decreasing again.