300
COMPARISON OF COLLOID LIVER SCAN, COMPUTED TOMOGRAPHY AND GRAY-SCALE ULTRASONOGRAPHY IN THE EVALUATION OF THE DIFFUSE LIVER DISEASE PROVEN BY THE PERITONEOSCOPIC BIOPSY.


Seventy cases of the diffuse liver disease (cirrhosis, 26; pre-cirrhosis, 5; active chronic hepatitis, 12; inactive chronic hepatitis, 5; acute hepatitis, 5; fulminant hepatitis, 6; biliary stasis, 5; fatty metamorphosis, 4; others, 2) proven by the peritoneoscopic biopsy were studied with three modalities such as colloid liver scan, X-CT and gray-scale ultrasonography.

On the colloid liver scan, the size of the liver and spleen, the liver and spleen size ratio, the RI distribution of the liver, spleen and bone marrow were evaluated. On X-CT, the size, surface and the CT number of the liver and spleen, the liver and spleen size ratio, the diameter of the portal vein were evaluated. On gray-scale ultrasonography, liver deformity, edge, surface, intrahepatic echo, splenomegaly were graded.

We reported the role, characteristic and weak point of the three modalities for diagnosis of the diffuse liver diseases.

301
CLINICAL EVALUATION OF PROGRESS OF DIFFUSE HEPATIC DISEASES BY LIVER SCINTIGRAPHY USING TC-99M-SULFUR COLLOID - CORRELATION BETWEEN ITS INTER-ORGAN UPTAKE RATIO AND BIOPSY FINDINGS.

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Correlation between scintigraphic inter-organ uptake ratio and biopsy findings was studied in 34 cases with diffuse hepatic diseases, including 8 cases of non-specific reactive hepatitis (NSRH), 6 cases of chronic inactive hepatitis (CIH), 12 cases of chronic active hepatitis (CAH) and 6 cases of liver cirrhosis (LC). Using a computer-interfaced scintillation camera, regions of interest corresponding to liver (L), spleen (S), bone marrow (BM) and back grounds (BG) were selected, and the ratios were computed among each other. Biopsy findings of piecemeal necrosis (PN), necrosis (N), portal fibrosis (PF) and Kupffer cell mobilization (K) were divided into five grades respectively. In CAH, significant correlation was showed between PN and L/S, N and S/BG, and N and L/S (Spearman rank correlation coefficient).

Additionally, BM/BG and L/BM showed significant difference between LC and non-LC. With ranking the four disease category from 1 to 4 in order of NSRH, CIH, CAH and LC, significant correlation was present between this ranking and L/BM. Conclusively, it was suggested that liver scintigraphy is beneficial to evaluating progress of diffuse hepatic diseases.