
Hepatobiliary scintigraphy with Tc-99m E-HIDA was performed in 24 cases and its quality and usefulness were evaluated.

1) 50% retention time in serum at 5 minutes after the injection of the agent was 9 min. in normal cases, but one with Tc-99m PI 29 min.

2) The image of the common bile duct was able to be demonstrated at bilirubin serum level up to 6.9mg/dl and hepatic image was obtained at the level of 8.4mg/dl serum bilirubin.

3) The urinary excretion of the agent was estimated to be very low in the images as compared with other agents. Consequently the agent was evaluated to be rapid and high in ability of the hepatic uptake and excretion and so the agent seems to be more useful for diagnosis of hepatobiliary disease and for shortening of the examination time than other agents.


The relationship between hepatic uptake and biliary excretion of Tc-99m E-HIDA and liver function was investigated in 40 men and 13 women with or without various hepatobiliary diseases. When 53 subjects were taken as a group, the half-time of the interval till the maximum activity is reached (uptake T1/2) was not correlated with any of liver function tests, but a significant correlation was noted between the excretory half-time and the icterus index and LDH. In healthy individuals, excretory T1/2 was not correlated with the icterus index or gamma-GTP but was correlated with LAP and alkaline phosphatase. In individuals with gallbladder diseases, a correlation was noted between excretory T1/2 and the icterus index, gamma-GTP, LAP and alkaline phosphatase. The mean of the uptake T1/2 was slightly longer in hepatitic and cirrhotic patients than in normal subjects and the mean of excretory T1/2 was not significantly different from normal in individuals with gallbladder diseases but was slightly prolonged in patients with hepatitis or cirrhosis.