

I. Radionuclide Diagnosis of Intrahepatic Stones

Shin-Hwa YEH

Department of Nuclear Medicine, Veterans General Hospital
and National Yang-Ming Medical College, Taipei, Taiwan

Hepatic lithiasis is a major disease in Asia, especially East Asia. Liver (intrahepatic) stones lie in the right and/or left hepatic ducts or their branches, with or without stones in the common duct or gallbladder. They are not of cholecystic origin, have the highest incidence among the young and middle-age groups, and affect people in low-income brackets. Choledocholithiasis is an entirely different condition, for an intrahepatic stone consists chiefly of bilirubinates with low calcium content. Clinically, the attack is generally indicative of cholangitis. More often than not, all three features of Charcot's triad fever, upper abdominal pain, and jaundice are present. In severe cases, there are crisis-like attacks of such severity that shock-like reactions develop, and unless surgical decompression of the biliary tract is done immediately, the patient often dies.

For a screening study, plain abdominal radiographs are not helpful since all the stones are radiolucent. Oral and intravenous cholangiographic studies fail to yield useful information during the acute attack because of jaundice in almost all patients. Even during remission, 70% of conventional cholangiographic studies fail to visualize the biliary tree. Although percutaneous transhepatic cholangiography has been tremendously helpful

in the diagnosis and confirmation of intrahepatic stones, it is an invasive technique, carrying morbidity and even mortality. Even endoscopic retrograde cholangiography has significant complications in 3% and mortality in 0.2%. Furthermore, in only four of 36 patients was the diagnosis made preoperatively, in a series published in 1979, without benefit of technetium-99m (^{99m}Tc) hepatobiliary scanning. Accordingly, it is necessary to have a simple, safe and reliable screening test for detecting intrahepatic stones. Radionuclide studies can meet such a need.

For the past ten years, a series of radionuclide methods for detecting hepatic lithiasis has been developed by us, ranging from qualitative sequential scintigraphy through quantitative hepatic retention ratio determination to parametric image, namely, retention ratio image. I will review these methods in this presentation. In addition, I will also present Ga-67 Scanning in suppurative cholangitis complicating intrahepatic lithiasis. Our results and experience indicate that the radionuclide methods would be a simple and innocuous techniques for screening and detecting liver stones.

II. 甲状腺癌の治療

嶋 岡 勝 太 郎

放射線影響研究所

甲状腺癌はいろいろな病理組織像をもち、悪性度の順に未分化癌、髄様癌、分化癌に分類される。分化癌は本邦でも甲状腺癌の大部分を占め、乳頭状および濾胞状の腺癌の組織像がいろいろな割合いで混在するが、少しでも乳頭構造が混在するものは乳頭癌と分類される。乳頭癌は一般に予後が良く、転移はリンパ性が多い。これに反して、まったく乳頭構造を欠くものは濾胞癌と分類さ

れ、血行転移により遠隔転移をしばしば起こす。その予後は良好である乳頭癌に比べると悪性である。

分化癌に対しては、外科的療法が優先する。甲状腺の切除およびリンパ節転移のある場合はその郭清がなされる。分化癌の細胞には TSH 受容体が存在するので、甲状腺ホルモンを使って抑制療法を行う。また遠隔転移がすでにあるもの、および一部のリスクの高い分化癌の患