

Clinical Evaluation of Hepatoscintigraphy in the Diagnosis of Right Upper Abdominal Masses in Children and Infants

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Hepatoscintigraphy is now widely available as one of the most important diagnostic tools for the upper abdominal masses mainly in adults.

The authors proposed to evaluate the usefulness of hepatoscintigraphy in the diagnosis of right upper abdominal masses of children and infants in comparison with abdominal angiography.

Of about 70 cases of abdominal masses treated at Kobe Children's Hospital, 10 interesting cases with a mass in the right upper quadrant including hepatoblastoma, solitary liver cyst, retroperitoneal cyst, chronic hepatitis, von Gierke's disease, choledochal cysts and unusual hepatic lobation were presented and discussed.

^{131}I -Rose Bengal was used for biliary disorders and ^{198}Au colloid for other cases with an average dose of 70 μCi .

As the abdominal masses in children usually have too advanced, scintigrams revealed distinct abnormal patterns caused by either intra- or extrahepatic lesions. However, decisive diagnosis was possible only in a case of hepatoblastoma, 3

cases of choledochal cyst those failed to be visualized by intravenous cholangiography, and a case of anomalous hepatic lobation. Other much informative findings were obtained in cases of chronic hepatitis and von Gierke's disease which showed hepatic deformity well corresponded with palpable masses. It was hardly possible to obtain further detailed informations such as whether the mass was intra- or extrahepatic, benign or malignant, resectable or unresectable.

Aortography, performed in all cases except choledochal cysts and liver anomaly, clearly delineated the masses showing its location, pathological characteristics and, in some cases, its resectability as well.

Although with limited indications for the diagnosis of right upper abdominal masses, hepatoscintigraphy is very useful for the diagnosis of biliary disorders, while abdominal aortography, though more traumatic than scintigraphy, has more wide indication and reliability especially for the diagnosis of tumors.