SOME PROBLEMS OF HEPATO-BILIARY SCINTIGRAPHY WITH Tc-99m-PI
and Haruo Okawa***

*Department of Radiology, Chiba University School of Medicine, ** Central Division of Radiology, Chiba University Hospital, *** Department of Pediatric Surgery

We performed 33 times of hepato-biliary scintigraphies on 28 cases in infancy and childhood. In these, there were 7 control cases, 10 cases of congenital biliary atresia, 8 cases of congenital choledochal dilatation and 3 cases of neonatal hepatitis. Diagnostic capability and application method of this examination was discussed. 99mTc-PI was far superior to 131I-BSP in respect of clear image, low exposure dose and short examination time.

In the case of CBD, sample informations were given pre- and post-operatively. They coincided very well with those of Echogram, DIC, PTC and ERCP.

In the case of CBA, very useful informations were given to show the post-operative biliary excretion.

As for the pre-operative examination of CBA, even the image in 20 hours was not enough to give the precise information in some cases. 131I-BSP excretion test in 72 hours was still necessary for these cases.

Two cases of NH were misdiagnosed as CBA pre-operatively. Differential diagnosis between CBA and NH was still difficult even with 99mTc-PI.

No side effect were observed with this nuclide.

THE CLINICAL SIGNIFICANCE AND LIMITATION OF THE HEPATO-BILIARY SCAN USING 99mTc-PI
Satoshi Nakano*, Hajime Watahiki*, Isao Takeda*, Kimio Kitamura*, Hideo Ichikawa**, Isao Kanamori*** and Tokoji Kimura***

*Department of Gastroenterology, ** Radioisotope Labolatory Section, Ogaki Municipal Hospital, Ogaki, Gifu ken, Japan.

Summarizing our observations on 117 cases with hepato-biliary diseases, the indication of this hepato-biliary scan for the diagnosis of the hepato-biliary disease is as follows.
1) The determination of a certain cause of the cold area of the liver detected by the conventional liver scan.
2) The demonstration of the changes of intra hepatic biliary tree, especially for detecting of the intrahepatic stone or malignancy.
3) The illustration of the biliary system in the cases with inflammatory disease of the biliary system in which DIC could not demonstrate the biliary system.
4) The demonstration of the biliary system in the cases having moderate jaundice in which cases DIC could not demonstrate the biliary system.
5) The demonstration of the biliary system in the cases having hypersensitivity for the iodine agent.
6) The observation of the biliary passage after the biliary surgery.
7) The recognition of the biliary system after Co irradiation therapy on the hepato-biliary system.

This 99mTc-PI hepato-biliary scan was proved to be useful especially for detecting intrahepatic lesions but DIC was more suitable for the diagnosis of gall stone.
No side effect was noticed in this series of the study.