

## Bile leakage after living donor liver transplantation demonstrated with hepatobiliary scan using $^{99m}\text{Tc}$ -PMT

Akishige KANAZAWA,\* Shoji KUBO,\* Hiromu TANAKA,\* Shigekazu TAKEMURA,\*  
Keiichi YAMAZAKI,\* Kazuhiro HIROHASHI\* and Susumu SHIOMI\*\*

*\*Department of Gastroenterological and Hepato-Biliary-Pancreatic Surgery, and \*\*Department of Nuclear Medicine,  
Osaka City University Graduate School of Medicine*

Although it is recognized that hepatobiliary scan is of value in assessing postoperative complications of biliary surgery or cadaveric whole liver transplantation, there have been few reports regarding its usefulness following living donor liver transplantation. We performed living donor liver transplantation in a patient with biliary cirrhosis due to hepatolithiasis, using a right lobe graft from her sister. On the 15th postoperative day, bile discharge appeared from the operative wound. The leakage point could not be identified by computed tomography and cholangiography from the biliary drainage catheter. Hepatobiliary scan with Tc-99m Sn-*N*-pyridoxyl-5-methyltryptophan ( $^{99m}\text{Tc}$ -PMT) demonstrated biliary extravasation from the left side of the anastomosis of the hepatico-jejunostomy, indicating biliary leakage from the anastomosis. Conservative therapy was continued because the radioisotope flowed smoothly into the reconstructed jejunum and the biliary drainage catheter, and the leakage was stopped on the 63th postoperative day. Hepatobiliary scan is useful in determining the therapeutic plan as well as detection of bile leakage and identification of leakage points after living donor liver transplantation.

**Keywords:** hepatobiliary scan, bile leakage,  $^{99m}\text{Tc}$ -PMT, living donor liver transplantation