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Impaired hepatic function in segmental biliary obstruction demonstrated with a receptor-binding radiotracer

Yusuke Inoue,* Kikuo Machida,** Norinari Honda,** Toshio Mamiya,** Taku Takahashi,**
Tsuyoshi Kamano** and Yasuhito Sasaki***

* Department of Radiology, Branch Hospital of Tokyo University

** Department of Radiology, Saitama Medical Center, Saitama Medical School

*** Department of Radiology, Faculty of Medicine, University of Tokyo

A patient with cholangiocarcinoma underwent left-sided cholangiojejunostomy, and hepatic functional imaging with a receptor-binding radiotracer and SPECT was performed to evaluate the distribution of functional reserve. It revealed decreased accumulation in the regions with residual dilatation of the intrahepatic bile ducts, indicating several kinds of focal damage in hepatic function caused by segmental biliary obstruction. The radioligand may be useful in assessing regional hepatic function, and the high spatial resolution provided by SPECT appears to play an important role for this purpose.

Key words: 99mTc-GSA, segmental biliary obstruction, SPECT