Analysis of factors affecting uptake of Tc-99m Sn-N-pyridoxyl-5-methyltryptophan by hepatocellular carcinoma

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We performed Tc-99m PMT imaging in 176 patients with HCC and evaluated factors affecting 99mTc-PMT uptake by HCC with a logistic model. The probability of HCC showing increase in uptake of the radioisotope was 104.6 times higher in patients with the Ed I type than in those with the Ed III type and 12.1 times higher in patients with a tumor diameter of 5.0–7.9 cm than in those with a tumor diameter of 2.0–5.0 cm. Among the other variables, the serum AFP level and sex were suggested to have effects similar to those of the tumor size on Tc-99m PMT uptake by HCC. The grade of morphological differentiation of the tumor was therefore most markedly related to Tc-99m PMT uptake.

Key words: Tc-99m PMT, hepatocellular carcinoma, grade of tumor differentiation