

## Summary

### Prediction of the Clinical Efficacy of Hepatic Arterial Chemotherapy for Metastatic Hepatic Cancer by Intraarterial Infusion of $^{99m}\text{Tc}$ -MIBI

Toru SAGUCHI\*, Kiyoshi KOIZUMI\*, Shingo INOUE\*, Hideo KAKIUCHI\*\*, Kimihiko ABE\*\*\*, Kenji KATSUMATA\*\*\*\*, Tatsuto ASHIZAWA\*\*\*\* and Keiichirou YAMAMOTO\*\*\*\*

\*Department of Radiology, Hachioji Medical Center of Tokyo Medical University

\*\*Department of Radiology, Itabashi Central Hospital

\*\*\*Department of Radiology, Tokyo Medical University

\*\*\*\*Department of Surgery, Hachioji Medical Center of Tokyo Medical University

SPECT was performed in 11 patients with metastatic hepatic cancer by intraarterial infusion of  $^{99m}\text{Tc}$ -MIBI before hepatic arterial chemotherapy was started, and the degree of accumulation and clinical efficacy were compared. Early and delayed SPECT images were obtained and various parameters were calculated, including early ratio (ER), delayed ratio (DR), washout rate (WR), and retention index (RI). Judgement of clinical efficacy was made by CT before and after hepatic arterial chemotherapy and was classified as effective, unchanged, and progressive

groups. The mean values of ER and DR in the effective group were higher than those in the progressive group. No relationships were noted among the WR and RI values of the groups. The assessment of ER and DR using  $^{99m}\text{Tc}$ -MIBI intraarterial SPECT is considered to be useful for prediction of the clinical efficacy of hepatic arterial chemotherapy for metastatic hepatic cancer.

**Key words:** Metastatic hepatic cancer, Hepatic arterial chemotherapy,  $^{99m}\text{Tc}$ -MIBI, Intraarterial infusion, SPECT.