Visualization of orbital retinoblastoma with technetium-99m (V) dimercaptosuccinic acid

Pinar Özgen Kiratli,* Hayyam Kiratli** and Meral T. Ercan*

Departments of *Nuclear Medicine and **Ophthalmology, Ocular Oncology Unit, Hacettepe University Faculty of Medicine, Ankara, Turkey

The potential contributions of technetium-99m (V) dimercaptosuccinic acid scintigraphy in the evaluation of orbital retinoblastoma, its local extensions and metastases were assessed in this study. Both planar and SPECT images clearly demonstrated the primary tumor and metastatic sites. Following confirmation of our results by contemporaneous ultrasonography, MRI and a subsequent incisional biopsy, the patient was treated with external beam radiotherapy and chemotherapy. This preliminary study showed that in combination with other diagnostic tests, Tc-99m (V) DMSA scintigraphy may play a role in the detection and follow-up of the local tumor extensions and metastases in patients with retinoblastoma.

Key words: retinoblastoma, orbit, technetium-99m (V) DMSA, magnetic resonance imaging