Demonstration of abnormal perfusion in the pons with high resolution SPECT and Technetium-99m HMPAO in a patient with acoustic neuroma

Nobuharu YUI, Takashi TOGAWA, Fujimi KINOSHITA, Hiroki NAMBA,* and Yoshihisa AKIYAMA**

Division of Nuclear Medicine, *Division of Neurosurgery, ***Division of Radiation Physics, Chiba Cancer Center Hospital

We detected a regional defect in the pons with ipsilateral cerebellar hypoperfusion in a patient with acoustic neuroma by brain SPECT with 99mTc HMPAO. A high spatial resolution SPECT system with three detectors equipped with fan-beam collimators was employed. This is the first report of a defect in the brainstem being visualized by perfusion SPECT and this method could make it possible to clarify the cause of a remote effect on the cerebellar perfusion by injury to the brainstem.

Key words: Acoustic neuroma, SPECT, Tc-99m HMPAO, Pons