Interesting Image

뇌경색 환자에서 뇌종양과 유사한 Tc-99m tetrofosmin의 섭취

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Cerebral Infarction Mimicking Brain Tumor on Tc-99m Tetrofosmin Brain SPECT imaging

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A 43-year-old man was presented with persistent headache for two weeks. T2 weighted MR imaging showed high signal intensity with surrounding edema in the left frontal lobe. These findings were considered with intracranial tumor such as glioma or metastasis. Tc-99m tetrofosmin SPECT showed focal radiotracer accumulation in the left frontal lobe. The operative specimen contained cerebral infarction with organizing leptomeningeal hematoma by pathologist. Another 73-year-old man was hospitalized for chronic headache. Initial CT showed ill-defined hypodensity with mass effect in the right parietal lobe. Tc-99m tetrofosmin SPECT showed focal radiotracer uptake in the right parietal lobe. These findings were considered with low-grade glioma or infarction. Follow-up CT after 5 months showed slightly decreased in size of low density in the right parietal lobe, and cerebral infarction is more likely than others. Tc-99m tetrofosmin has been proposed as a cardiotracer of myocardial perfusion imaging and an oncotropic radiotracer. Tc-99m tetrofosmin SPECT image provides a better attractive alternative agent than Tl-201 as a tumor-imaging agent, with characteristics such as high-energy flux, short half-life, favorable biodistribution, dosimetry and lower background radioactivity. We have keep in mind on the analysis of Tc-99m tetrofomin imaging when cerebral infarction is being differentiated from brain tumor. (Korean J Nucl Med 38(3):268-271, 2004)

Key Words: Brain tumor, Cerebral infarction, Tc-99m tetrofosmin SPECT

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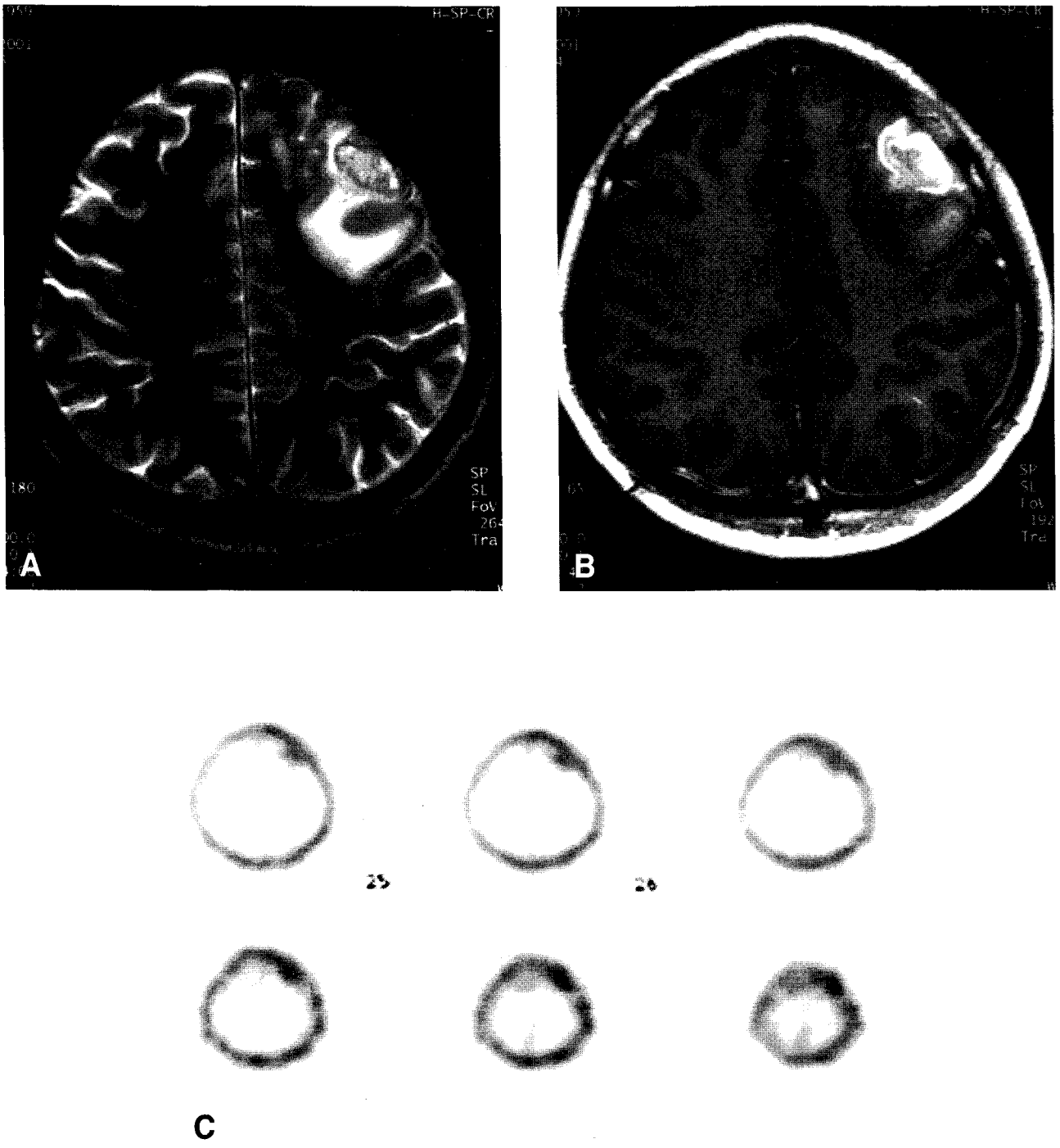

Fig. 1. (A) T2 weighted MR imaging showed high signal intensity with surrounding edema in the left frontal lobe. (B) There was intense enhancement following to gadolinium-DTPA enhancement T1 weighted MR imaging. (C) Tc-99m tetrofosmin SPECT showed focal radiotracer accumulation in the left frontal lobe[1-6].

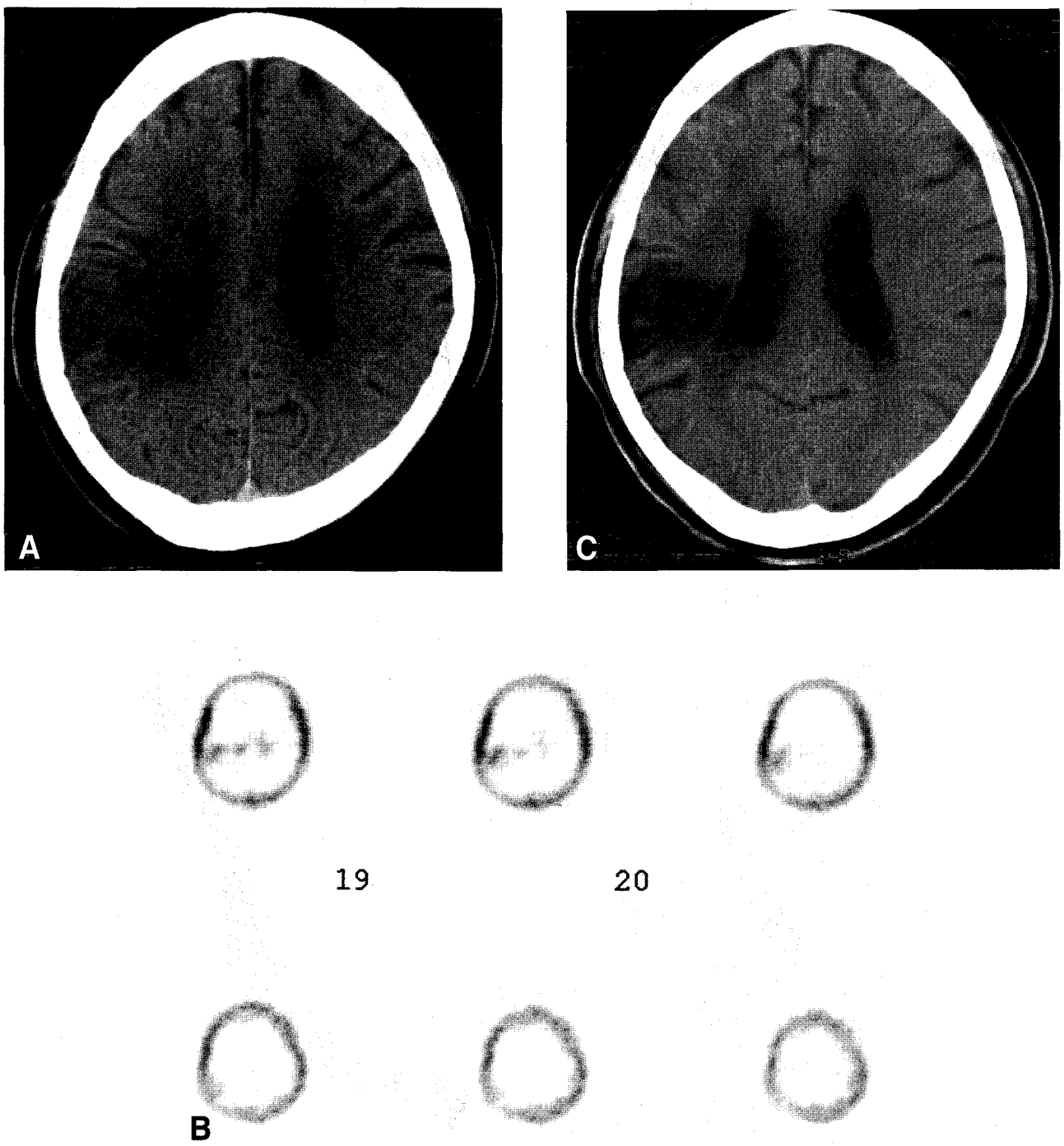

Fig. 2. (A) Initial CT showed ill-defined hypodensity with mass effect in the right parietal lobe. (B) Tc-99m tetrofosmin SPECT on same period of (A) showed focal radiotracer uptake in the right parietal lobe. (C) Follow-up CT after 5months showed slightly decrease in size of low density in the lesion[1-6].

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