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Brain perfusion SPECT in neuro-Behçet's disease: Discordance between Tc-99m-HMPAO and Tc-99m-ECD

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A patient with neuro-Behçet's disease was studied with both Tc-99m-HMPAO and Tc-99m-ECD brain perfusion SPECT during the same time period. In Tc-99m-HMPAO SPECT, focal high uptake was observed in the left basal ganglia where MRI depicted abnormal signal intensity. Conversely, Tc-99m-ECD SPECT did not show corresponding high uptake, but demonstrated rather low uptake in contrast to the Tc-99m-HMPAO SPECT. This case suggests that Tc-99m-HMPAO and Tc-99m-ECD may show discordant distribution in inflammatory brain disease such as neuro-Behçet's disease.

Key words: neuro-Behçet's disease, brain perfusion SPECT, Tc-99m-ECD, Tc-99m-HMPAO