

## Clinical Picture

# Previously undescribed MR imaging findings of multiple system atrophy-parkinsonian type; dot sign anterior substantia nigra and hypertrophic geniculate bodies

Photographs and text from: Hayri Ogul<sup>1,\*</sup> and Zakir Sakci<sup>2</sup>

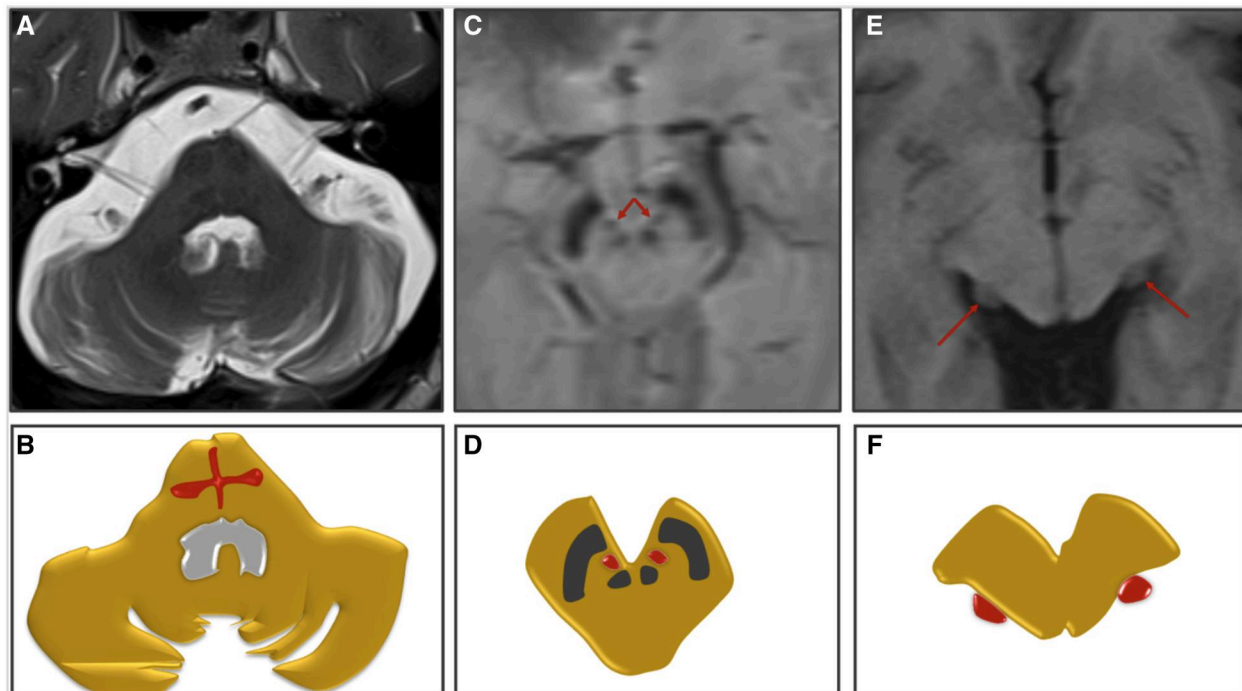
<sup>1</sup>Department of Radiology, Medical Faculty, Istanbul Medipol University, Istanbul, Turkey

<sup>2</sup>Department of Radiology, Umraniye Training and Research Hospital, Istanbul, Turkey

\*Address correspondence to Dr H. Ogul, Department of Radiology, Medical Faculty, Istanbul Medipol University, Istanbul, Turkey. Email: drhogul@gmail.com

A 49-year-old man was referred with complaints of bradykinesia and resting tremor in both upper extremities, constipation and hyposmia for 3 years. Four months ago, he had diagnosed with multiple system atrophy-parkinson type (MSA-P) by his neurologist. Conventional cerebral magnetic resonance imaging (MRI) and susceptibility weight imaging (SWI) sequences showed

typical and atypical imaging findings for multiple system atrophy-parkinsonian type (Figure 1). Diagnosis is often delayed because MSA-P clinically mimics Parkinson's disease in the early stages.<sup>1</sup> Early diagnosis is very important for appropriate treatment planning. MRI with SWI sequence is a very useful modality in correct diagnosis.



**Figure 1.** Axial T2 weighted MR image (A) and illustrating figure (B) demonstrate 'hot cross bun sign' in the pons as a typical finding of MSA. Transvers SWI sequence (C) and illustrating image (D) describe 'hypointense dot sign' (short arrows) in the anterior of the pars compacta of the substantia nigra. Axial T1-weighted MR image (E) and compatible illustrate frame (F) show hypertrophied geniculate bodies (long arrows) in the posterior of the cerebral peduncles.

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## Reference

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