

Cruciform Pontine MRI Hyperintensities (“Hot Cross Bun” Sign) in Non-Multiple System Atrophy Patients

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A 20-year-old woman presented with a 5-year history of gait disturbance and tremor. Her mother showed the same clinical features and expired due to aspiration pneumonia at the age of 28-year-old. She was diagnosed as a spinocerebellar ataxia type 2 with molecular genetic PCR analysis. Brain T2-weighted MR image showed

cruciform signal hyperintensity in pons (Figure A). A 61-year-old man presented with a 7-year history of gait disturbance after cerebellar hemorrhage. He did not show autonomic dysfunction. Brain T2-weighted MR image showed cruciform signal hyperintensity in pons (Figure B). Cruciform pontine MRI hyperintensities

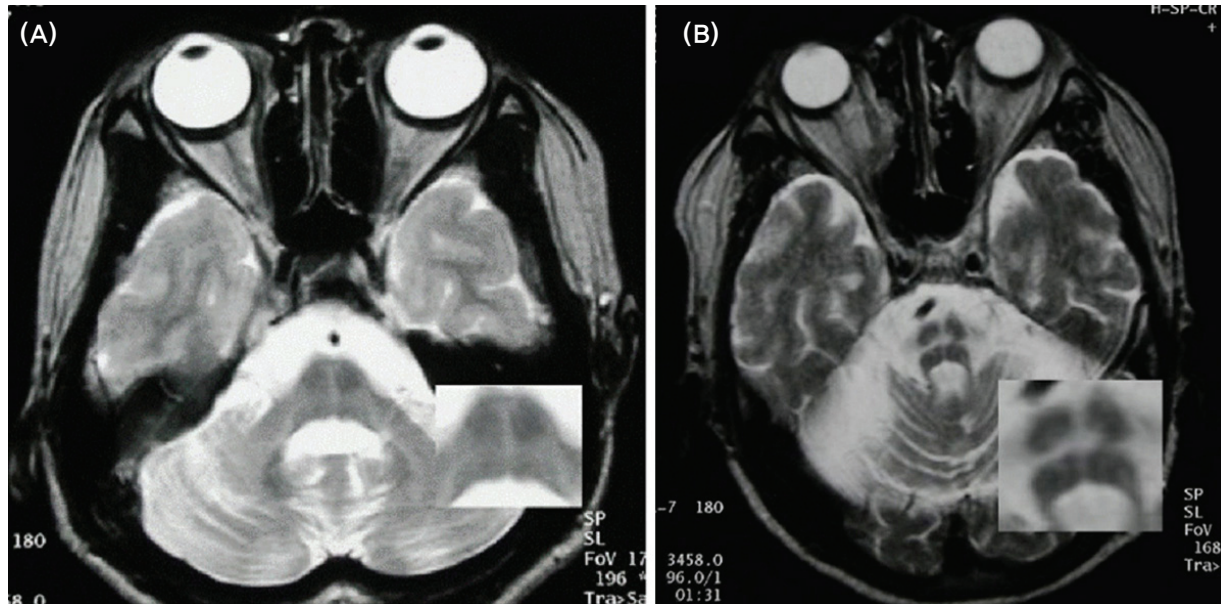


Figure. (A) Cruciform signal hyperintensities within the pons and atrophy of pons are demonstrated on the axial T2-weighted MRI of 20-year-old spinocerebellar ataxia type 2 patient with a 5-year history of ataxia. (B) Cruciform signal hyperintensities within the pons and atrophy of pons are demonstrated on the axial T2-weighted MRI of 61-year-old patient with a 7-year history of cerebellar hemorrhage.

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(“hot cross bun” sign) is a radiologic sign which has been said to specific for multiple system atrophy.[1,2] But our patients were diagnosed as spinocerebellar ataxia type 2 and old cerebellar hemorrhage. Therefore we suggest that “hot cross bun” sign reflects degeneration of transverse pontocerebellar fibers and is not a pathognomic sign of multiple system atrophy.

REFERENCES

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