Hereditary Spastic Paraparesis with Thin Corpus Callosum: Characteristic MRI Findings

Herediter Spastik Paraparezi ve İnce Korpus Kallosum: Karakteristik MRG Bulguları

Turk Norol Derg 2011;17:214-215

Ş. Eser Şanverdi Topaloğlu, Kader Karlı Oğuz

Hacettepe Üniversitesi Tıp Fakültesi,
Radyoloji Anabilim Dalı, Ankara, Türkiye

Ş. Eser Şanverdi Topaloğlu, Kader Karlı Oğuz

Department of Radiology, Faculty of Medicine,
University of Hacettepe, Ankara, Turkey

Anahtar Kelimeler: Spastik parapleji, herediter, korpus kallosum.
Key Words: Spastic paraplegia, hereditary, corpus callosum.

Hereditary spastic paraplegia (HSP) is a clinical group of neurodegenerative disorders characterized by slowly progressive spastic gait, ataxia and cognitive impairment. According to the clinical manifestation, HSP can be classified as the pure (isolated HSP) or complicated form. HSP with thin corpus callosum (HSP-TCC) is the most common form of complicated HSPs and has autosomal recessive inheritance.

The most characteristic conventional magnetic resonance imaging feature of the HSP-TCC is marked thinning

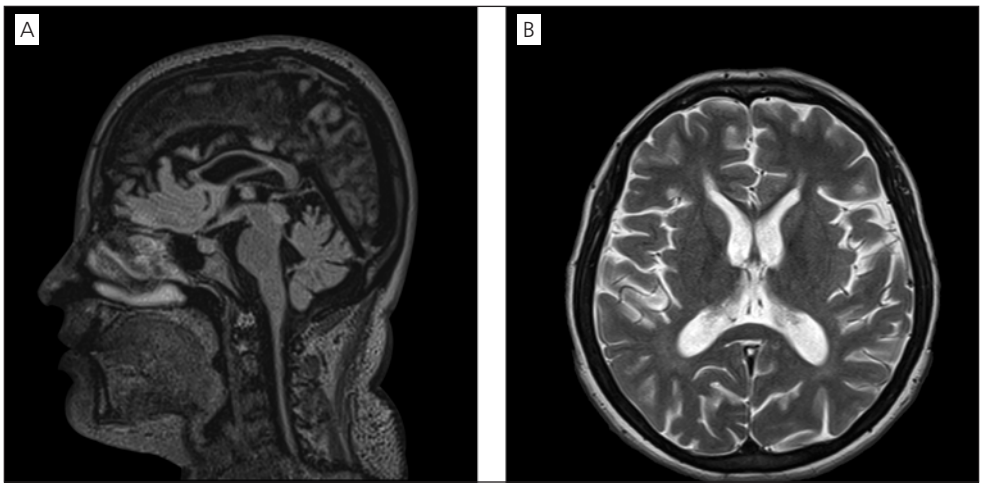

Figure 1. Sagittal FLAIR **(A)** and axial T2-weighted **(B)** magnetic resonance images of an 18-year-old female patient with progressive spastic gait and ataxia. Note the profound thinning of the CC in the genu and body. Diffuse atrophy is seen, but more prominently in the frontal lobe. The cancellation of the findings suggests HSP-TCC.

of the anterior parts (genu and body) of the corpus callosum (Figure 1a). Subtle, diffuse increase in T2 signal intensity predominantly in the frontal subcortical white matter is another characteristic abnormality in HSP-TCC (1,2) (Figure 1b).

REFERENCES

1. *Franca MC Jr, D'Abreu A, Maurer-Morelli CV, Seccolin R, Appenzeller S, Alessio A, et al. Prospective neuroimaging study in hereditary spastic paraplegia with thin corpus callosum. Mov Disord 2007;22:1556-62.*
2. *Chen Q, Lui S, Wang JG, Ou-Yang L, Zhou D, Burgunder JM, et al. Diffusion tensor imaging of two unrelated Chinese men with hereditary spastic paraplegia associated with thin corpus callosum. Neurosci Lett 2008;441:21-4. Epub 2008 Jun 7.*