

[PICTURES IN CLINICAL MEDICINE]

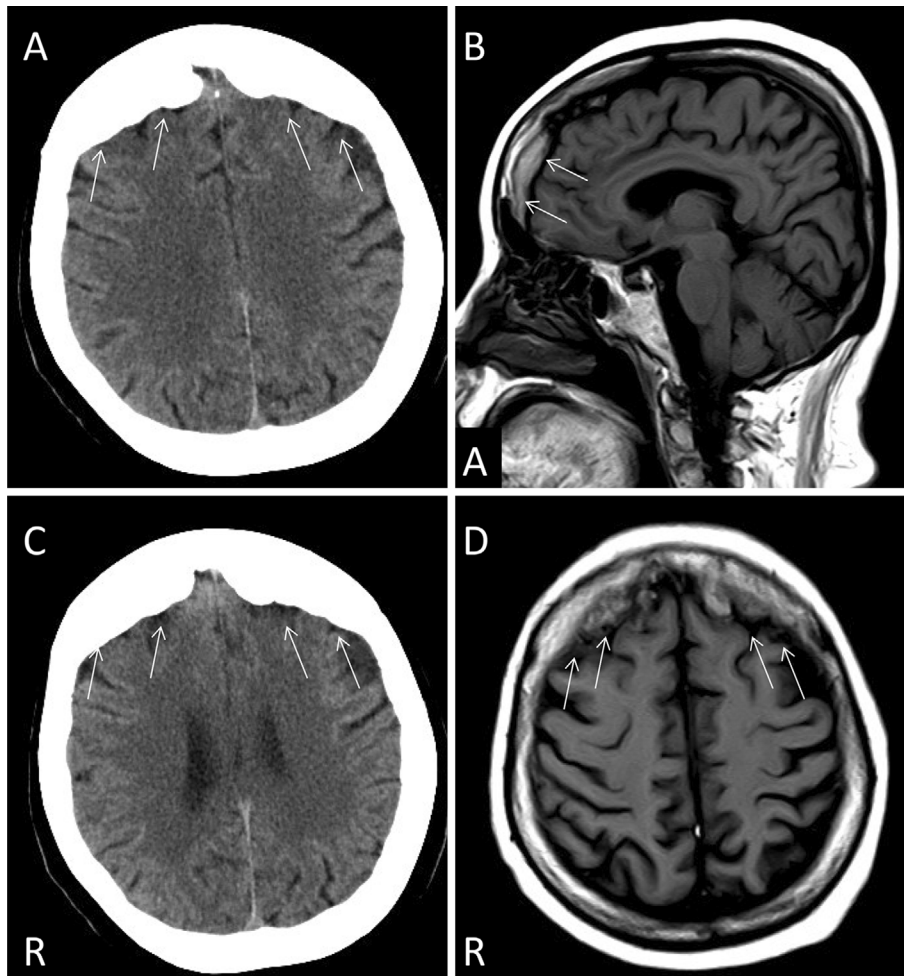
Hyperostosis Frontalis Interna in Myotonic Dystrophy

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Key words: hyperostosis frontalis interna, myotonic dystrophy

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Picture.

A 68 year-old-woman presented with a 20-year history of progressive difficulty in walking. A neurological examination showed hatchet face, impaired extraocular movement and facial and limb weakness with percussion and grip myotonia. Brain computed tomography (Picture A, C) and T1-weighted magnetic resonance imaging (Picture B, D)

showed the symmetrical thickening of the inner table of the frontal bone, “hyperostosis frontalis interna” (HFI). Her serum creatine kinase level was within the normal range (65 U/L). Her serum calcium level was normal (9.3 mg/dL; normal range, 8.6-10.6), but her phosphorus level was low (2.0 mg/dL; normal range, 2.5-4.5). Large cytosine-thymine-

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guanine (CTG) expansion (1,500 times) of myotonic dystrophy protein kinase and myogenic changes on needle electromyography led to a diagnosis of myotonic dystrophy type 1.

HFI has been found in 5-12% of the general population. It has been associated with post-menopause, obesity, pregnancy, acromegaly, virilism, hypertrichosis, and diabetes as well as myotonic dystrophy (1). Myotonic dystrophy is a multisystem disorder in which patients manifest cataracts, cardiac conduction abnormalities and endocrine abnormalities. HFI should be recognized as one of the features of myotonic dystrophy (2).

The authors state that they have no Conflict of Interest (COI).

References

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