Multimedia teaching material

Epileptic Disord 2019; 21 (4): 389-90

Brainstem lesion causing paroxysmal ataxia, dysarthria, diplopia and hemifacial spasm (PADDHS)

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Epileptic Disorders

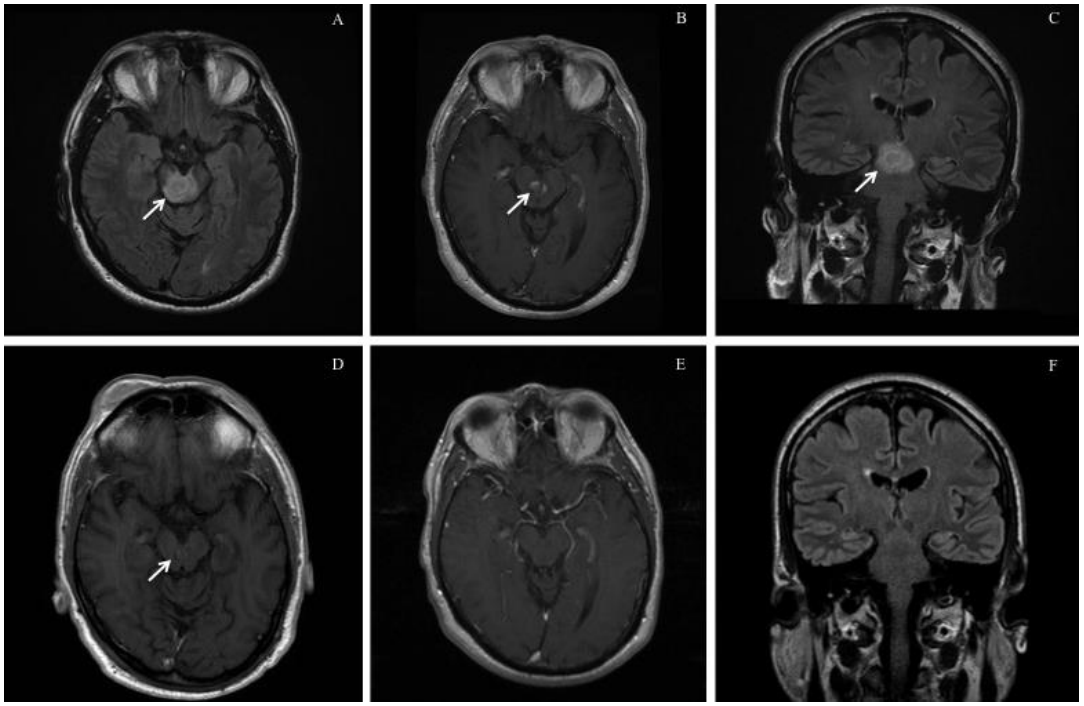
Paroxysmal: sudden, stereotyped, 15-30", ~40-times/day attacks.

Ataxia: gait ataxia with risk of fall and upper limb ataxia featured by lack of coordination during voluntary movements.

Dysarthria: distorted voice (similar to a 45-rpm record played at 33rpm) .

Diplopia: binocular double vision- two images separated horizontally with a horizontal saccade component.

Hemifacial Spasm: unilateral, tonic, and clonic contractions of the facial muscles.



PADDHS

(**A**-**C**) Axial and coronal brain MRI showing enhanced right midbrain and a cystic lesion below the level of the red nucleus, extending to the midbrain-pons junction. After five months, MRI showed only a small level of nuanced midbrain flair hyperintensity (**D**-**F**) without enhancement (**E**). Ictal EEG, during hyperventilation, showed movement artefacts and myogenic potentials without paroxysmal discharges (**G**).

In this case, despite normal visual acuity and lack of mucocutaneous lesions, Neuro-Behcet's disease (NBD) might be a possible diagnosis. Characteristic imaging findings of acute/subacute NBD include *brainstem-centered encephalitis* with contiguous spread into the basal ganglia and subsequent reversibility with small residual central signal changes supporting an oedematous nature of lesions. Moreover, from the clinical point of view, around a third of NBD patients have *single episodes*, a third have repeated relapses with remission, and a third undergo a progressive disease course with accrual of neurological impairments.

Epileptic Disorders