Teaching Video NeuroImage: Subacute Cerebellar Ataxia in an Adolescent With Antibodies Against Metabotropic Glutamate Receptor Type 1

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A 15-year-old boy developed progressive cerebellar dysfunction over three weeks. Examination showed ataxic gait, unsteady tandem gait, horizontal nystagmus, intention tremor, and ataxia on heel-toe-shin testing (Video 1). Dysdiadochokinesia and dysarthria were found but not illustrated in the video. Neuroimaging and cerebrospinal fluid (CSF) biochemistry was normal. Serum and CSF metabotropic glutamate receptor type 1 (anti-mGluR1) auto-antibodies were found. His cerebellar function improved markedly within three months of initiating immunotherapy (Video 1). The median age of onset of anti-mGluR1 encephalitis is 55 years old.\(^1\)\(^2\) Paraneoplastic syndromes should be considered, but anti-mGluR1 encephalitis is often autoimmune in younger patients.\(^1\)\(^2\)

References


Video

Title: Subacute cerebellar dysfunction in adolescent with anti-mGlur1 encephalitis

Legend: The video shows our patient with abnormal cerebellar signs including broad-based ataxic gait and unsteady tandem gait, horizontal nystagmus, mild intention tremor with finger-nose testing, and pronounced ataxia on heel-toe-shin testing. This is followed by resolution of the abnormal cerebellar signs following immunotherapy.
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