CLINICAL SNAPSHOT

Figure: Magnetic resonance imaging of the cervical spine showed myelodema with longitudinal stripes of contrast medium enhancement

Neuroborreliosis as a Rare Cause of Myelitis in Childhood

An 11-year-old girl presented with a 3-week history of pain and weakness in both arms. The proprioceptive reflexes and sensory perception were normal. Examination revealed a circular rash in the right armpit, but the patient had no memory of a tick bite.

Magnetic resonance imaging showed signal alterations with contrast medium uptake (C4 to T4) (Figure). A cerebrospinal fluid (CSF) sample revealed lymphocytic pleocytosis (260/ μ L) and a protein concentration of 194 mg/dL with normal glucose and lactate levels, as well as an albumin L/S ratio ($\times 1000$) of 23.8 (normal range <5), indicating a barrier disorder. Moreover, the CSF analysis was positive for *Borrelia burgdorferi* (IgM antibodies 63 U/mL and IgG antibodies 1508 U/mL) with a positive immunoblot for IgM antibodies and borderline positive immunoblot for IgG antibodies. Serological examination showed elevated levels of IgG antibodies (49 U/mL) and negative IgM antibodies (17 U/mL) (normal range for both antibodies <25 U/mL). Treatment with cefotaxime, aciclovir (until a viral pathogenesis could be excluded), and immunoglobulin led to complete resolution of symptoms. Neuroborreliosis should be considered in the presence of myelitis of unclear origin.

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