

THIS IS AN OCR'D DOCUMENT



Nonparalytic poliomyelitis in Lyme borreliosis

A van Baalen, H Muhle, T Straube, O Jansen and U Stephani
Arch. Dis. Child. 2006;91;660-
doi: 10.1136/adc.2006.098392

Updated information and services can be found at:
<http://adc.bmjournals.com/cgi/content/full/91/8/660>

These include:

Rapid responses

You can respond to this article at:
<http://adc.bmjournals.com/cgi/eletter-submit/91/8/660>

IMAGES IN PAEDIATRICS
doi: 10.1136/adc.2006.098392

Nonparalytic poliomyelitis in Lyme borreliosis

An 11 year old girl with a two week history of upper back pain presented with back stiffness and tenderness to palpation of the spinous processes. She had no sensory or motor abnormalities. Magnetic resonance imaging (MRI) showed no vertebral abnormalities, but unexpectedly swelling and vasogenic oedema of the spinal cord (fig 1), predominantly of the grey matter (fig 2), compatible with poliomyelitis. Cerebral spinal fluid (CSF) revealed lymphocytic pleocytosis (421 cells/ μ l, 99% lymphocytes), raised protein (1096 mg/l), and strongly increased (40-fold) intrathecal production of specific antibodies against *Borrelia burgdorferi*. Antibodies to enteroviruses could not be detected. Back pain, CSF, and MRI abnormalities resolved completely after a two week period of therapy with cefotaxime.

In neuroborreliosis, back pain results from meningoradiculoneuritis (Garin-Bujadoux-Bannwarth syndrome) and myelitis.' Lyme myelitis involves the white matter, resulting in paralysis. Nevertheless, in our patient Lyme borreliosis manifested as nonparalytic poliomyelitis, which itself is usually caused by enteroviruses.

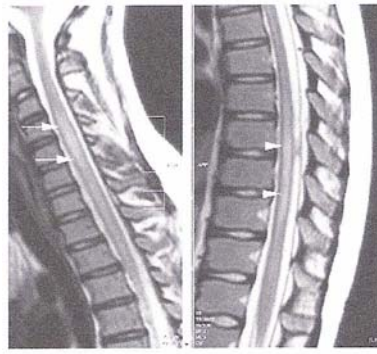


Figure 1
Sagittal T₂ weighted MRI of the spinal cord, showing a central high signal intensity extending with its maximum at **the** level of the lower cervical (arrows) and thoracic (arrowheads) spine.



Figure 2 Axial T₂ weighted MRI of the Spinal cord, showing a butterfly shaped high signal intensity of the grey matter (arrows).

Competing interests: None declared

**A van Baalen, H Muhle, T Straube, O Jansen,
U Stephani**

University Medical Center Schleswig-Holstein,
Christian-Albrechts-Universität zu Kiel,
Germany; van.baalen@pedneuro.uni-kiel.de

Reference

- 1 **Reimers CD**, Neubert U. Garin-Bujadoux-Bannworth Syndrome. *Lancet* 1990;**336**:128