Atypical symptoms of Lyme disease: numbness, paresthesia and abdominal wall weakness

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by Daniel J. Cameron, MD, MPH

“A 58-year-old woman was seen in the outpatient neurology clinic of this hospital in early autumn because of hypoesthesia [numbness], paresthesia, and weakness,” writes Reda and colleagues.

Her initial symptoms began 10 weeks prior with back pain occurring between her shoulders. But the pain resolved without intervention.

Several weeks later, numbness developed in a bandlike distribution around her trunk, writes Reda from Massachusetts General Hospital and Harvard Medical School. The following week, the numbness spread, extending to her upper abdomen.

“The patient was unable to sit up from the supine position without using her arms, and she had abdominal distention,” explains Reda.

Lyme disease caused tingling and burning sensations in patient's fingers.

Her symptoms progressed. Paresthesia (tingling or burning sensation) developed in the third, fourth, and fifth fingers of her left hand and the fourth and fifth fingers of her right hand.

The numbness that she was experiencing extended to the genital area, causing urinary incontinence.

The woman, who lived in a wooded area of Connecticut, reported having a “small, uniformly erythematous, painless, nonpruritic rash that was consistent with the hallmark skin lesion of early Lyme disease, erythema migrans,” the authors explain.

She believed the rash, which occurred three months prior to her admittance to the hospital, was caused by an insect bite. It resolved without treatment.

Her medical history also showed hypertension, hypothyroidism, and left tibial and fibular fractures resulting from a fall, along with L4 – L5 decompression and bilateral medial facetectomy.

She also presented with diabetes with a blood glucose level of 291 mg per deciliter and a glycated hemoglobin level of 11.8% (normal less than 5.7).

There were no other identifiable causes for her symptoms, despite having an extensive evaluation.
“Her recent rash and associated risk factors for Lyme disease made Lyme radiculopathy our leading diagnosis,” the authors write.

A Lyme disease Western blot test revealed 9 out of 10 IgG bands were positive.

The woman did not need a spinal tap to confirm her Lyme disease diagnosis because, as Reda explains, “When a patient is seropositive and has a characteristic clinical syndrome for Lyme neuroborreliosis, as in this case, CSF tests for Lyme disease are unnecessary to establish a diagnosis.”

Nevertheless, a spinal tap was performed. “Direct detection of the infectious agent with CSF PCR assays is usually not possible,” the authors explain.

“CSF PCR assays for Lyme-related Borrelia are not recommended,” they state, “and a negative assay (which was present in this case) does not influence diagnostic considerations, because sensitivity of the assay is poor.”

**Final diagnosis**

“On the basis of the patient’s clinical features and seroreactivity, the final diagnosis was Lyme meningoradiculitis,” writes Reda.

The patient improved with a 3-week course of intravenous ceftriaxone. Although her pain diminished over the next 4 weeks, she continued to have some residual problems.

Four months after her initial treatment began, “her sensation and strength of the abdominal wall had increased such that she could contract the rectus abdominis muscles while standing,” Reda explains. “But she continued to have difficulty sitting up from the supine position.”

“The weakness of the left foot had diminished, but she still had difficulty walking on the heel,” writes Reda.

*Editor’s note: The authors did not discuss the concerns some doctors have raised regarding a persistent infection. (There is no reliable test to rule out a persistent infection.)*

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**References:**