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# Sarcoid Myelitis Masking as Multiple Sclerosis in an Otherwise Healthy 45-year-old: A Case Report

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# Sarcoid Myelitis Masking as Multiple Sclerosis in an Otherwise Healthy 45-year-old: A Case Report

Beaumont

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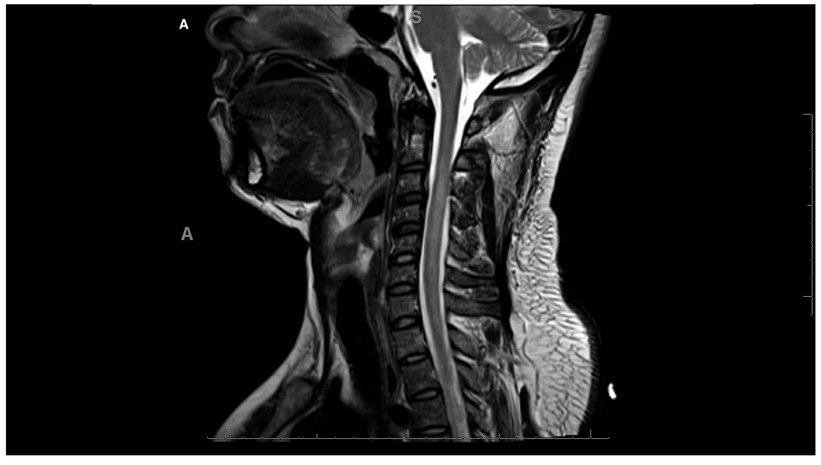
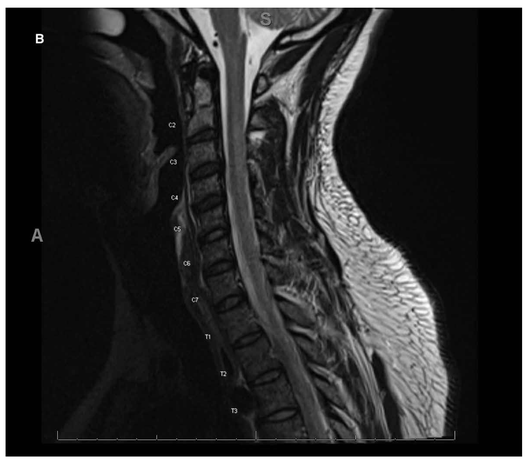
## Case Description

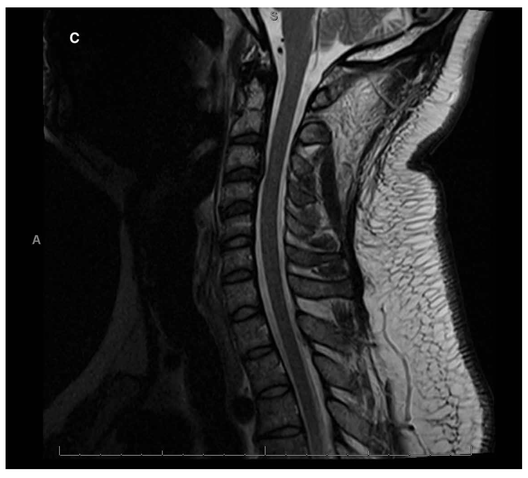
The patient presented with painful spasms in an ascending pattern from his lower extremity to this torso. He was initially diagnosed with multiple sclerosis (MS) in the outpatient setting. Five months later, he started to have rapidly progressive ascending spasms, Lhermitte's sign, left greater than right lower extremity weakness, and progressively developed worsening imbalance and falls. Inpatient workup included brain, cervical, and thoracic MRIs, which revealed longitudinally extensive transverse myelitis and signal changes in the right hemisphere. These findings were not considered typical for MS. Workup was negative for MS mimickers, including autoimmune, paraneoplastic, neuromyelitis optica spectrum disorder (NMOSD), tick-borne/ infectious, metabolic, mitochondrial, toxic, and nutritional causes. He was admitted to the rehabilitation unit given his waxing and waning clinical course. He was treated with multiple courses of steroids, plasmapheresis, Intravenous Immunoglobulin, and Ocrelizumab with mild improvement.

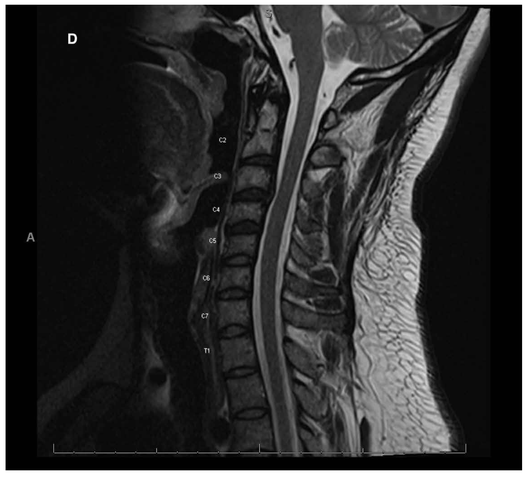
## Images

T2 MRI cervical spine sagittal images. On initial presentation to the hospital (A) Scattered T2 bright foci on each side of cervical spinal cord, with areas of enhancement worse along the left aspect. (B) 1 month after. (C) 8 months after. (D) 14 months after initial presentation.




## Discussion

Longitudinally Extensive Transverse Myelitis is a rare neurological condition characterized by spinal cord lesions that extends over three or more vertebrae, often associated with NMOSD and MS. When early treatment fails to elicit an adequate response, the differentials must be expanded early on to direct a focused treatment plan. This includes an early referral to rehabilitation to gain better functional independence. Repeat cervical MRI one month later demonstrated worsening myelopathic changes. The patient decided not to pursue a spinal cord biopsy. Treatment with additional steroids and infliximab only provided moderate response. The patient requires a wheelchair for mobility and continues to work with therapy to gain functional independence.

## Conclusion

Patients who present with MS exacerbation often improve after administration of corticosteroids. In unclear and challenging cases, including those unresponsive to traditional treatment, additional workup is often needed in a timely manner to direct an effective treatment plan.

## References

1. Deng P, Krasnozhen-Ratush O, William C, Howard J. Concurrent LETM and nerve root enhancement in spinal neurosarcoid: A case series. *Mult Scler.* 2018;24(14):1913-1916.
2. Kitley JL, Leite MI, George JS, Palace JA. The differential diagnosis of longitudinally extensive transverse myelitis. *Mult Scler.* 2012;18(3):271-285.
3. MacLean HJ, Abdoli M. Neurosarcoidosis as an MS Mimic: The trials and tribulations of making a diagnosis. *Mult Scler Relat Disord.* 2015;4(5):414-429.
4. Scott TF, Yandora K, Kunschner LJ, Schramke C. Neurosarcoidosis mimicry of multiple sclerosis: clinical, laboratory, and imaging characteristics. *Neurologist.* 2010;16(6):386-389.

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