A 28-year-old vegetarian woman with pernicious anemia developed progressive leg spasticity and psychosis leading to food paranoia and severe malnutrition. She presented with encephalopathy, anemia, hypoalbuminemia, and severe deficiency of zinc and vitamins B1, B6, and B12. MRI revealed a lesion of the splenium of the corpus callosum (figure 1) and spinal cord changes (figure 2). This case shows a combination of findings associated with vitamin deficiencies: corpus callosum (B complex, Marchiafava-Bignami disease) and spinal cord (B12, subacute combined degeneration). Primary demyelinating, autoimmune, and metabolic disorders (Cu, vitamin E) were ruled out given the clinical context and workup. After treatment, the psychosis resolved; the spasticity and weakness improved.

Study Funding
The authors report no targeted funding.

Disclosure
The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.
Figure 2 Spine MRI Shows Involvement of the Posterior Cord (Dorsal Column) and the Lateral Tracts (Including the Corticospinal Tracts) Spanning the Entire Cord

(A, B) Sagittal section demonstrates the characteristic “inverted V sign” at the level of the cervical spine (C, D) and the lumbar spine (E).

Appendix Authors

<table>
<thead>
<tr>
<th>Name</th>
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References

Teaching NeuroImage: Concomitant Brain and Spine Lesions due to Multiple Nutritional Deficiencies
Qasem N. Alshaer and Rocio Garcia-Santibanez
Neurology 2021;97:e1464-e1465 Published Online before print May 13, 2021
DOI 10.1212/WNL.0000000000012186

This information is current as of May 13, 2021