

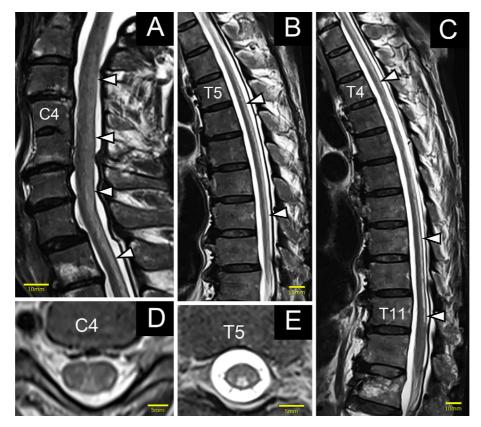
[PICTURES IN CLINICAL MEDICINE]

Longitudinally Extensive Spinal Lesion of Subacute Combined Degeneration

Terunori Sano^{1,2}, Masayuki Ohira^{1,2}, Wakiro Sato¹ and Masaki Takao^{1,2}

Key words: spinal cord, MRI, malnutrition, gait disturbance, vitamin B12 deficiency

(Intern Med 62: 313-314, 2023) (DOI: 10.2169/internalmedicine.9497-22)





An 85-year-old man with alcoholism developed lasting gait disturbance that deteriorated over 6 months, until he was unable to stand even with help. Distal proprioception and vibratory sensation were absent. T2-weighted magnetic resonance imaging (MRI) revealed hyperintensity in the posterior column stretching nearly the entire length of the spinal cord (Picture A-C) with an inverted V-sign (Picture D-E). Blood tests revealed macrocytic hypochromic anemia and undetectable serum vitamin B12, and serum anti-aquaporin 4 antibody was negative, while the serum copper level was normal. He was diagnosed with subacute combined degeneration (SCD). Vitamin B12 therapy improved the symptoms partially until he was able to stand while being supported and diminished the MRI lesions, although the signal abnormalities persisted. SCD is caused by vitamin B12 deficiency, affecting the posterior and lateral

¹Department of General Internal Medicine, National Center Hospital, National Center of Neurology and Psychiatry, Japan and ²Department of Laboratory Medicine, National Center Hospital, National Center of Neurology and Psychiatry, Japan Received: January 31, 2022; Accepted: April 24, 2022; Advance Publication by J-STAGE: June 7, 2022

Correspondence to Dr. Terunori Sano, tsano@ncnp.go.jp

funiculus, which are commonly localized to the cervical or thoracic cord. Advanced age, long disease duration, and extensive long spinal lesions are the worst prognostic factors (1, 2). SCD must be considered in cases of myelopathy in elderly individuals with alcoholism and early treatments are important.

The authors state that they have no Conflict of Interest (COI).

References

1. Vasconcelos OM, Poehm EH, McCarter RJ, Campbell WW,

Quezado ZM. Potential outcome factors in subacute combined degeneration: review of observational studies. J Gen Intern Med **21**: 1063-1068, 2006.

 de Medeiros FC, de Albuquerque LA, de Souza RB, Gomes Neto AP, Christo PP. Vitamin B12 extensive thoracic myelopathy: clinical, radiological and prognostic aspects. Two cases report and literature review. Neurol Sci 34: 1857-1860, 2013.

The Internal Medicine is an Open Access journal distributed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view the details of this license, please visit (https://creativecommons.org/licenses/ by-nc-nd/4.0/).

© 2023 The Japanese Society of Internal Medicine Intern Med 62: 313-314, 2023