

#### **NEUROIMAGE**



# 미만성 경수막염으로 발현한 항-MOG 항체 연관질환

# 김준순

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# Myelin Oligodendrocyte Glycoprotein Antibody-Associated Disease Presenting as a Diffuse Pachymeningitis

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A 75-year-old male with a 30-year history of ulcerative colitis requiring long-term oral corticosteroid therapy presented with a 6-month history of persistent headaches and gait disturbance. Brain magnetic resonance imaging (MRI) demonstrated diffuse pachymeningeal enhancement and thickening along the bilateral cerebral convexities (Fig. 1A, B). Cerebrospinal fluid analysis revealed a normal white blood cell count (0 cells/uL), but markedly elevated protein levels (167.3 mg/dL) and an increased immunoglobulin G index (0.75). A vasculitis panel was all negative. Testing for myelin oligodendrocyte glycoprotein (MOG) antibodies revealed positivity with an mean fluorescence intensity ratio of 4.00 (positive threshold >3.65). Finally, the patient was diagnosed with MOG antibody-associated disease (MOGAD) presenting as pachymeningitis. After treatment with oral prednisolone and azathioprine, the patient demonstrated gradual clinical improvement, and the follow-up brain MRI after

Address for correspondence: Jun-Soon Kim, MD

Department of Neurology, Seoul National University Bundang Hospital, Seoul National University College of Medicine, 82 Gumi-ro 173beon-gil, Bundang-gu, Seongnam 13620, Korea Tel: +82-31-787-7563, Fax: +82-31-787-4059 E-mail: bigai300@gmail.com 3 months of treatment showed significant resolution of the pachymeningitis (Fig. 1C, D). Clinicians should be mindful that MOGAD can present with a wide variety of clinical manifestations, including pachymeningitis.<sup>1,2</sup>

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#### **Authors Contributions**

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#### **Conflicts of Interest**

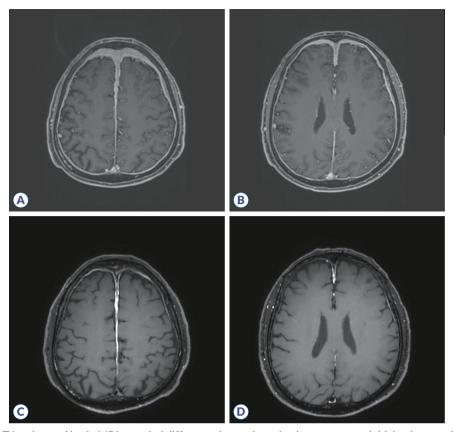
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**Figure 1.** The initial T1-enhanced brain MRI revealed diffuse pachymeningeal enhancement and thickening, particularly pronounced along the bilateral frontal lobes and extending across the bilateral cerebral convexities suggestive of the pachymeningitis (A, B). After 3 months of treatment, comparison at the same level demonstrated significant improvement in the pachymeningeal enhancement and thickening (C, D). MRI, magnetic resonance imaging.

# **Ethical Approval**

Not applicable.

### **Patient Consent for Publication**

Consent for publication was obtained directly from the patient involved in this study.

# **I** References

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- Sechi E, Cacciaguerra L, Chen JJ, Mariotto S, Fadda G, Dinoto A, et al. Myelin oligodendrocyte glycoprotein antibody-associated disease (MOGAD): a review of clinical and MRI features, diagnosis, and management. *Front Neurol* 2022;13:885218.