

[PICTURES IN CLINICAL MEDICINE]

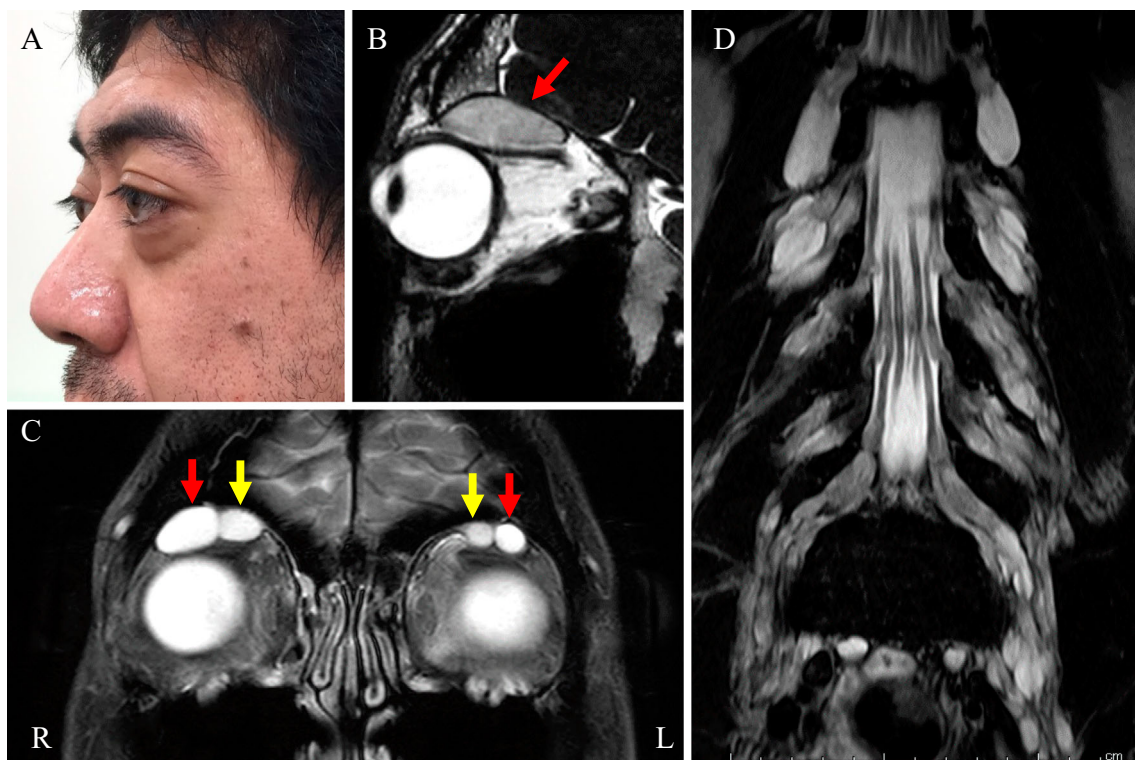
Exophthalmos and Supraorbital Bulging in Anti-neurofascin-155 Antibody-positive Neuropathy

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Key words: anti-neurofascin-155 antibody, exophthalmos, nerve hypertrophy

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Picture.

A previously healthy 32-year-old man presented with a 2-year history of progressive limb weakness and sensory disturbance. Electrophysiological testing revealed sensorimotor demyelinating polyneuropathy. He fulfilled the diagnostic criteria for chronic inflammatory demyelinating polyneuropathy (CIDP). In addition, immunoglobulin G4 anti-neurofascin-155 (NF155) antibodies were found in the patient's serum sample. A physical examination revealed weakness of the distal upper and lower limbs, sensory ataxia, and tremors. He also presented with supraorbital bulging and exophthalmos (Picture A). However, no sensory disturbance

was noted around these areas. Magnetic resonance imaging (MRI) revealed trigeminal nerve hypertrophy, resulting in exophthalmos [Picture B; sagittal view of three-dimensional Fast Spin-Echo MRI, Picture C; coronal view of T2-weighted MRI; abnormal swelling of the supraorbital (red arrow) and supratrochlear nerves (yellow arrow), both branches of the frontal nerve, were observed]. Lumbar nerve root hypertrophy (Picture D) was also noted. MRI and ultrasonography are performed to detect nerve hypertrophy in patients with anti-NF155 antibody-positive CIDP (1). Trigeminal nerve hypertrophy was reported on MRI in

69.2% of cases (2). Therefore, it is essential to conduct a thorough physical examination to detect enlarged nerves. Anti-NF155 antibody levels should be assessed in CIDP patients with exophthalmos and supraorbital bulging to determine the appropriate treatment (1).

This study is a retrospective observational single case report, and written informed consent was obtained from the patient.

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

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