Ophthalmic nerve hypertrophy in chronic inflammatory demyelinating polyradiculoneuropathy

Our patient exhibited bilateral exophthalmos (A, B). Cranial T2-weighted MRI (C) and 3D magnetic resonance cisternography (D) depict abnormal swelling of bilateral supraorbital and supratrochlear nerves, which are branches of ophthalmic nerves in the orbit. Cervical T2-weighted MRI depicts hypertrophic nerve roots (E).

A 59-year-old woman with a long-standing diagnosis of chronic inflammatory demyelinating polyradiculoneuropathy (CIDP) developed facial numbness and exophthalmos. Sural nerve biopsy revealed onion bulb formation consistent with CIDP. Neurologic examinations revealed distal dominant muscle atrophy with areflexia and impairment of all sensory modalities; cranial nerve involvement, including bilateral exophthalmos, left-side facial palsy, and left-side periorbital hypoesthesia; and swelling of the sural and subcavian nerves. MRI demonstrated marked thickening of bilateral ophthalmic nerves (figure). Such a finding has been reported rarely in the literature. Neurologists should be aware that patients with CIDP might show exophthalmos due to ophthalmic nerve hypertrophy.

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