Wall-eyed bilateral internuclear ophthalmoplaegia (WEBINO) from a paramedian mesencephalic infarct

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DESCRIPTION

An 84-year-old man with a history of hypertension, diabetes mellitus and ischaemic heart disease, was admitted for sudden onset binocular diplopia and unsteady gait. Physical examination showed primary gaze exotropia of both eyes (figure 1), bilateral internuclear ophthalmoplaegia and impaired vertical gaze of his right eye (video 1). Convergence, saccades and smooth pursuit were impaired. Vestibulo-ocular reflex was normal. Pupillary and levator function was normal. MRI of the brain revealed a paramedian mesencephalic infarct (figure 2). The patient's condition improved significantly after treatment with aspirin and rehabilitation therapy.

Wall-eyed bilateral internuclear ophthalmoplaegia (WEBINO) is a rare neuro-ophthalmological condition characterised by dissociated abducting nystagmus, impaired convergence and supranuclear vertical gaze palsy.^{1 2} It is caused by a midbrain lesion damaging the bilateral medial longitudinal fasciculus and pretectum, which is supplied by the anteromedial perforators of the posterior cerebral artery.²

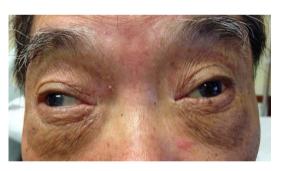


Figure 1 Primary gaze exotropia of both eyes.



Video 1 Bilateral internuclear ophthalmoplaegia.



Figure 2 MRI DWI image shows an infarct in paramedian midbrain. DWI. diffusion weighted imaging.

Learning points

- Wall-eyed bilateral internuclear ophthalmoplaegia (WEBINO) is a rare neuro-ophthalmological condition characterised by dissociated abducting nystagmus, impaired convergence and supranuclear vertical gaze palsy.
- ▶ It is caused by a midbrain lesion damaging the bilateral medial longitudinal fasciculus and pretectum, which is supplied by the anteromedial perforators of the posterior cerebral artery.

Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed

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