

aware of their presentation. Aqueous sampling for CMV should be considered when introducing intravitreal depots of steroid.

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Sir, Complete external ophthalmoplegia in headache, neurologic deficits, and cerebrospinal fluid lymphocytosis (HaNDL) syndrome

The headache, neurologic deficits, and cerebrospinal fluid (CSF) lymphocytosis (HaNDL) syndrome is characterized by a temporary neurological deficit followed by a severe headache with persistent CSF lymphocytosis. Other features include an increased CSF protein, an increased CSF opening pressure, and a viral prodrome. The exact pathogenesis of HaNDL is unknown.¹ We report a patient with HaNDL syndrome presenting with complete external ophthalmoplegia.

Case report

A healthy 18-year-old woman presented with a 1-week history of headache, nausea, vomiting, and fever. She developed severe visual loss over 4 days followed by acute ophthalmoplegia.

Her best-corrected visual acuity was hand motions, OD, and light perception OS. Humphrey visual fields revealed severe peripheral constriction OU. Her pupils were round and 6 mm; she had no relative afferent pupillary defect. She had bilateral ptosis and no extraocular motility. Vestibulo-ocular

reflexes were absent. Anterior chamber examination was normal. Optic discs were swollen with slit haemorrhages in the perimacular area. She had diminished light touch in patchy areas over her upper extremities.

Magnetic resonance imaging (MRI) of the brain and MR venogram of the brain with and without contrast were normal. CSF revealed an elevated opening pressure of 320 mm H₂O, 172 lymphocytes, 6 red blood cells, protein of 92 mg per 100 ml, and glucose of 55 mg per 100 ml. CSF VDRL and Lyme titres were negative. CSF cultures and PCR for HIV, HSV 1 and 2, and EBV were all negative. CSF IgG synthesis rate and oligoclonal bands were negative. TSH, antinuclear antibody, and acetylcholine receptor antibodies were normal. Single-fibre electromyography was unremarkable.

After CSF drainage with repeated lumbar punctures and receiving i.v. methylprednisolone 1 g/day for 5 days, her symptoms and signs resolved in several weeks, and her final visual acuity was 20/20 OU.

Comment

Blurred vision, photophobia, homonymous hemianopsia, photopsias, cortical blindness, papilledema, and sixth nerve palsies have previously been associated with HaNDL.² Although HaNDL is recognized as a distinct entity (IHS 7.8) in the International Headache Society Classification ICHD-II,³ monophasic cases like this could also represent unusual forms of viral meningitis. In addition to the self-limiting features of headache, dysesthesias, CSF lymphocytosis, and papilledema, this patient presents with transient complete external ophthalmoplegia, a neuro-ophthalmic sign not previously observed in HaNDL. External ophthalmoplegia can also be seen in idiopathic intracranial hypertension (IIH) and usually resolves with lowering of intracranial pressure.⁴ Ophthalmoplegia in HaNDL may arise from the effects of increased intracranial pressure and resolve with the lowering of CSF pressure in a similar manner to IIH.

Therefore, transient ophthalmoplegia should be recognized as part of the clinical spectrum of HaNDL syndrome. Although it is an uncommon disorder, ophthalmologists should include HaNDL in the differential diagnosis of any patient with papilloedema and transient neuro-ophthalmic signs.

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Sir,
Calcification of Hydroview lenses implanted in the United Kingdom during 2000 and 2001

Between 2002 and 2004, surgeons in UK hospitals began to see calcification of Bausch and Lomb Hydroview foldable lens implants, usually progressing to the need for explantation (Figure 1).^{1–3} None of the affected hospitals were routinely using Viscoat, known by this time to be associated with calcification of Hydroview lenses.^{4,5}

A total of 474 implants, out of 8239 lenses implanted between September 2000 and April 2001 at the seven hospitals, were explanted because of calcification (5.8%, Table 1). The wide geographical variation might be due to Na_2HPO_4 in the viscoelastics (Table 2). One of the authors, NH, noticed that more of his patients (Provisc) were affected than those of his colleague (Healon).

The lens exchange rate at Epsom and St Helier Hospitals in Surrey was much lower than elsewhere. An intriguing coincidence was that the Sutton and East Surrey Water Company was the only one in the country to soften the water it supplied. This possible explanation, however, was shown to be unlikely by a small study (Research Ethics Committee Ref 05/Q0104/171), which showed that the aqueous calcium levels of routine cataract patients at Peterborough, where the exchange rate was 40 times higher, were $0.72 \text{ mM} \pm 0.18$,

(mean \pm SD, $n = 20$) compared with 0.73 ± 0.19 , $n = 12$ at Epsom and St Helier Hospitals.

The absence of an explanation of the timing of this problem leaves the ophthalmic community less certain that a similar outbreak will not occur again. The recent

Table 1 Explantation rates for lenses implanted over the risk period of September 2000 to April 2001

Department of Eye	Viscoelastic	Implanted	Explanted	%
Cheltenham/ Gloucester 2007	Ophthalmol	1274	103	8.1
Epsom and St Helier Hospital 2007	Healon	600	3	0.5
Glamorgan 2007	Healon, Provisc	756	56	7.4
Lincoln 2004	Healonid	928	13	1.4
Norwich 2004	Healon	1500	30	2.0
Peterborough 2007	Provisc	1100	204	18.5
Southampton 2007	HPMC, Healon	2081	65	3.1
Total	—	8239	474	5.8

Department names are followed by the year of latest available figures.

Table 2 Levels of constituents of several viscoelastic agents used by hospitals affected by calcification of Hydroview lens implants

Viscoelastic	Hyaluronate, mg ml^{-1}	NaH_2PO_4 , mcg ml^{-1}	Na_2HPO_4 , mcg ml^{-1}
Healon, AMO	10	40	280
Ophthalmol, IOCOM	10	40	220
Provisc, Alcon	10	40	560
Viscoat, Alcon	30	0	2000

Viscoat also contains chondroitin sulphate 40 mg.

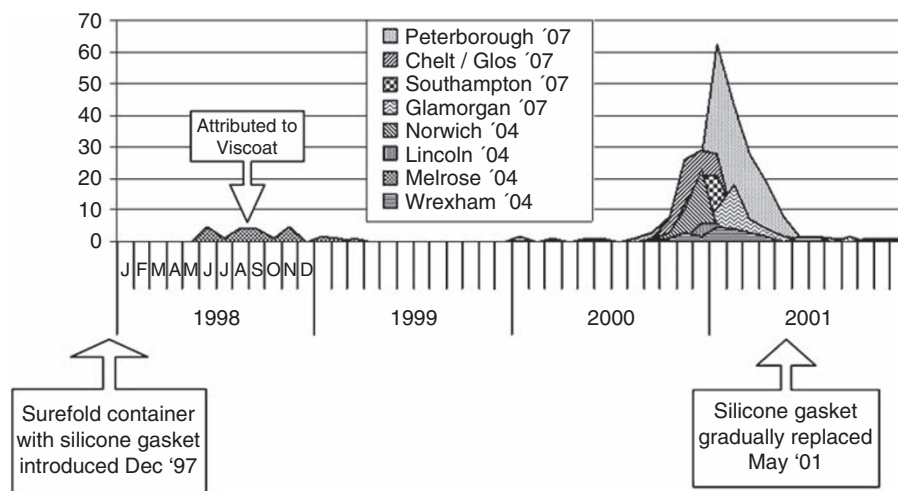


Figure 1 Hydroview lens implant exchanges by month of original implantation. Department names are followed by the year of latest available figures.