CASE REPORTS

Adult nasolacrimal duct bypass tubes: where do they go?

Hubertus v Below, Geoffrey E Rose

A 47-year-old man presented with a 1 year history of left epiphora. Six years previously it had been treated surgically in Turkey, although surgical details were not available and no external scars were evident.

His vision was Snellen 6/6 right and 6/60 left, the decreased left acuity being a result of past stromal herpetic keratitis. All four puncta were patent and the right lacrimal drainage system was open to irrigation. Syringing of the left lower canaliculus resulted in fluid reflux through the upper.

Dacryocystography demonstrated a stenotic left nasolacrimal duct with minimal flow of contrast medium into the nasal cavity (Fig 1). In addition, however, there was a slightly radio-opaque nasolacrimal duct tube lying within the soft tissues of the lateral wall of the nose, outside the radiographically demonstrated nasolacrimal duct. The radiographic images (Fig 1) suggest that the superior end of the tube was within the lacrimal sac, but that the inferior end had been passed inferomedially, across the very thin hamular process of the lacrimal bone, to lie within the

Fig 1A

Fig 1B

Figure 1 Dacryocystogram demonstrating stenotic left nasolacrimal duct and a misplaced nasolacrimal duct bypass tube (white arrow). The tube was functionless, the inferior end of the tube having been passed inferomedially across the lacrimal bone into soft tissues around the inferior meatus (black arrow). (A) Anterior-posterior supine view. (B) Right erect oblique radiograph.

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Figure 2 Adult nasolacrimal duct bypass tube (unflanged) of Chandler type 1 removed during dacryocystorhinostomy. The tube was 3 mm in diameter and 32 mm long, with a silk fixation suture still in place.

soft tissues around the inferior meatus. The malposition of the nasolacrimal intubation was confirmed at subsequent dacryocystorhinostomy, when the unflanged silicone tube of 3 mm outside diameter and 32 mm length was removed (Fig 2). The patient has been symptom free since surgery.

Comment

This clinical case provided a rare opportunity to demonstrate the actual course of a lacrimal bypass tube designed for placement within the nasolacrimal duct. The intended position for this and similar bypass tubes, such as those of Chandler¹ or Metaireau,^{2,3} is within the nasolacrimal duct; this case raises the issue as to how many *actually* lie in this location – an issue that might merit further investigation.

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Simultaneous retinal and optic nerve lesions in toxoplasmosis: the advantages of magnetic resonance imaging

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It is extremely rare for an optic nerve lesion to occur simultaneously with the reactivation of toxoplasmic retinochoroiditis.^{1–4} We report on a patient in whom the occurrence of an active optic nerve lesion was further confirmed using magnetic resonance imaging (MRI). This is the first clinical report of such an association.

Case report

A healthy 22-year-old man without HIV risk factors presented with right retro-ocular pain exacerbated by eye movements. Two days later he noted decreased vision in that eye. There had been two episodes of painless visual impairment in his right eye 1 and 4 years previously, leaving him with a paracentral scotoma. The first episode was diagnosed elsewhere as optic neuritis and the second as toxoplasmosis.

Examination of the right eye revealed visual acuity 6/12, right relative afferent pupillary defect, 1+ cells in the anterior chamber, and 2+ cells in the vitreous on slit-lamp examination. Visual fields showed a superior arcuate defect (Fig 1A) and a slightly blurred disc and two areas of active choroidoretinitis on funduscopy (Fig 1B). Examination of the left eye was entirely normal with a visual acuity of 6/4.

MRI of the optic nerves with STIR sequences⁵ revealed a 15 mm long lesion in the mid-portion of the right optic nerve (Fig 1C), non-adjacent to the globe. The lesion enhanced after gadolinium injection, indicating the presence of active inflammation.⁶ Brain MRI was normal.

The blood count, erythrocyte sedimentation rate (2 mm/h), serum angiotensin converting enzyme, autoantibodies, viral, and syphilis serologies were all normal, together with

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