



(a)

(b)

Fig. 2. Clinical photographs of cases 1 (a) and 2 (b). The balance of face and body development is normal, but precordial thoracostenosis is observed, and the breastbone protrudes forward.

infancy, and the renal disease can result in progressive renal failure, necessitating dialysis or kidney transplant.¹ In our cases, renal function was normal and respiratory insufficiency was not fatal. A mild form of Jeune syndrome,⁴ with only skeletal anomalies and initial renal impairment, has been reported. In our cases, however, bone changes were different from those described in Jeune syndrome. Our cases could not be diagnosed with Jeune syndrome based on the skeletal changes, and are different from reported clinical entities. Further examination and gene analysis are needed.

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Sir,

Ocular perforation associated with local anaesthetic for dacryocystorhinostomy

The use of local anaesthesia in ophthalmology continues to expand to include not only cataract surgery but also vitreoretinal, strabismus and oculoplastic surgery. The risk of ocular perforation with peribulbar anaesthesia for cataract surgery has been recognised for some time.¹ We report a case of ocular perforation associated with the administration of local anaesthetic for dacryocystorhinostomy.

Case report

A 64-year-old woman presented to eye casualty with a second episode of right dacryocystitis. The visual acuity was 6/6 bilaterally. She was given a 7 day course of oral amoxicillin 500 mg t.d.s. with flucloxacillin 250 mg q.d.s. and was reviewed when the infection had settled. Syringing showed patent canaliculi with regurgitation and she was listed for dacryocystorhinostomy (DCR) under local anaesthesia.

In the anaesthetic room the patient was sedated with 2.5 mg of intravenous midazolam. Two drops of amethocaine were instilled into both eyes. Two puffs of 2% lignocaine spray were applied to the right nasal passage. A nasal pack of 5% cocaine with adrenaline was placed in the right nasal antrum. A local anaesthetic mixture containing 4 ml of 2% lignocaine with 1:200 000 adrenaline and 4 ml of 0.75% bupivacaine was administered to three sites using a 25 mm, 25 G needle in a standard fashion.² The infraorbital nerve was infiltrated with 3 ml of anaesthetic, the skin of the side of the nose with 2 ml, and 3 ml was injected medially, lateral to the caruncle with a peribulbar technique. The patient experienced some discomfort during the administration of the anaesthetic, but this was mild. However, once the initial skin incision was made, the patient complained of pain that was not relieved by further infiltration of anaesthetic to the skin and periosteum. It was necessary to convert to a general anaesthetic, and the operation was completed without further incident.

The following day she was noted to have a mid-dilated pupil on the right, with a corrected visual acuity of 6/9. Fundoscopy showed a raised appearance of the temporal and inferior retina and choroid, the macula and disc were normal and there were no retinal haemorrhages. The possibility of globe perforation was raised at this point. One week later there had been a deterioration in the visual acuity to 6/36 and there was vitreous haemorrhage with a nasal suprachoroidal haemorrhage. The suprachoroidal haemorrhage resolved over the next week and at this stage retinal haemorrhages with scarring and vitreous incarceration were seen two disc diameters nasal to the optic disc. This was felt to represent a needle track from a perforating injury and she was admitted for vitrectomy and endolaser to the area of injury. Post-operatively, the retina remained flat and she achieved a final visual acuity of 6/9.

Comment

During the last 10 years DCR surgery has increasingly been performed under local anaesthesia^{3,4} because of the benefits of this technique to patient health and the move towards outpatient surgery. The local anaesthetic technique usually involves a medial canthal peribulbar injection.² Ocular perforation is a recognised complication of retrobulbar and peribulbar anaesthesia for cataract surgery^{1,5,6} but has not been reported during anaesthesia for DCR.

The incidence of penetrating injury is thought in part to be due to globe shape, with myopic eyes being at greater risk. Vohra and Good⁷ suggest, however, that a medial canthal approach is the safest, especially in larger globes.⁷ This is because of a reduction in the equatorial width to axial length ratio in high degrees of axial myopia. Inflammation of the tissues surrounding the usual landmarks, for example following dacryocystitis, as in this patient, can alter the anatomy of the injection site and increase the risk of perforation. Meyer⁸ reports some success with topical anaesthetic techniques which would eliminate the risk of penetrating ocular injury.

Early diagnosis and treatment of ocular perforations are essential for a good visual outcome^{6,9} and therefore there should be a high index of suspicion in those cases where the injections are excessively painful, or ineffective, or if there is hypotony of the globe or a decrease in visual acuity. DCR surgery has been effectively performed under local anaesthesia for many years⁴ but care must always be taken during intraconal anaesthetic injections.

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Sir,

Rapid development of visual field defects associated with vigabatrin therapy

Vigabatrin, a selective irreversible gamma-aminobutyric acid (GABA) aminotransferase inhibitor, is a new antiepileptic drug that is generally well tolerated with few side-effects. However, bilateral permanent visual