as suggested by thin collection of parafalcine subdural fluid. A thorough and detailed investigation to find out the causes of systemic hypertension revealed no specific disease. Thus, it was felt that the systemic hypertension itself most likely resulted from extreme anxiety state, constipation, and urinary retention. The hypertension was treated successfully with atenolol 10 mg daily orally, which controlled the BP to an average level of 100/ 60 mmHg. He was discharged to the DGH 8 weeks after the admission, with significant improvement in his general health, blood pressure, and ophthalmic findings. He had gained weight by 1.5 kg to 12.7 kg (still below 5th percentile), and his behaviour had become more outgoing and normal. We concluded that the most likely cause for the retinal and optic disc haemorrhage and persistent disc oedema was systemic hypertension.

His visual acuity responses were unreliable at first, but by using Cardiff Cards (vanishing optotypes), a binocular visual acuity of 0.8 was obtained on the eighth day after admission. Subsequent monocular acuity tests suggested better vision in the left eye, and by 3 months the visual acuity improved to 6/6 in each eye with Kay single picture card.

Photographs were taken 3 days after controlling the systemic hypertension with treatment. They showed gradual resolution of the optic disc oedema and complete resolution of retinal haemorrhages (Figure 1e and f). There was, however, asymmetrical optic disc atrophy when reviewed 3 months after discharge (Figure 1g and h).

#### Comment

Child abuse is a general term that is used to cover various forms of damage inflicted on children, including emotional abuse, neglect, induced illness, sexual abuse, and physical injury.<sup>3</sup> An estimated 1.5–2% of children are reported to be abused or neglected per year. About half of these are aged 0–4 years of age. Nonaccidental injury (NAI) has become a significant problem with important medical, social, and legal implications. Approximately 30% of NAI cases are found to have ocular signs, which form the presenting features in 4–6% of cases. Retinal haemorrhages are the most common findings.<sup>2,4</sup>

Adelman *et al*<sup>5</sup> reported a case of child abuse presenting as unexplained severe systemic hypertension with no ocular findings, associated with femoral fracture. The high BP was observed with adequate pain control using morphine and during sleep. Ekeberg *et al*<sup>6</sup> studied a group of 50-year-old men with systemic hypertension. This study revealed an association of childhood traumas and other psychological problems with the development of hypertension later in adult life.

In this child, we believe that it was the emotional aspect of the child abuse that caused fear and anxiety

associated with constipation and urinary retention, and the development of hypertension with retinopathy. We consider this as the first case report of another cause for retinal haemorrhages in child abuse than shaking injury. This case also illustrates how serial fundus photography is extremely useful in the documentation, detection, and diagnosis in suspected NAI in detailing the features of a condition that may otherwise be missed on clinical examination.

## References

- Behrman RE, Kleigman RM, Jenson HB. Nelson Text book of Paediatrics, 16th Ed. WB Saunders: London, 2000, pp 1348, 1450–1452.
- 2 May K, Doran RML. Non-accidental injury and the eye. Oxford Text Book of Ophthalmology, 1st Ed., Vol 2. Oxford Medical Publications, Oxford University Press: Oxford, 1999, pp 1091–1094.
- 3 Taylor D, Bonshek R, Brosnahan D, Carter N, Doran RML, Dutton G. Child abuse and the eye. Eye 1999; 13: 3–10.
- 4 Carty H, Ratcliffe J. The Shaken baby syndrome. *BMJ* 1995; 310: 344–345.
- 5 Adelman RD, Fink RA, Restaino IG. Child abuse in an infant presenting as unexplained acute systemic hypertension. *Paediatr Nephrol* 2000; 14(8–9): 811–812.
- 6 Ekeberg O, Kjeldsen SE, Eide I, Leren P. Childhood traumas and psychosocial characteristics of 50-year-old men with essential hypertension. *J Psychosom Res* 1990; 34: 643–649.

S Raman and RML Doran

Department of Ophthalmology Clarendon Wing, Leeds General Infirmary Leeds LS2 9NS, UK

Correspondence: S Raman 69, The Cornfields, Hebburn NE31 1YJ, UK

Tel: +44 113 392 2531 Fax: +44 113 292 6239

E-mail: somanraman310@msn.com

Sir,

# Pleomorphic adenoma of the lacrimal gland in a teenager, a case report

Eye (2004) 18, 77-79. doi:10.1038/sj.eye.6700484

Pleomorphic adenoma is the most common epithelial tumour of the lacrimal gland, accounting for half of all epithelial lesions in the lacrimal fossa.<sup>1</sup> It is extremely rare in childhood. Only eight cases are previously reported in the literature.<sup>2–7</sup> We report a further case in a young teenager whose presentation mimicked that of an inflammatory or infectious dacryoadenitis rather than a neoplastic process.









**Figure 1** (a) Clinical appearance of 14-year-old boy with erythema, swelling, and S-shaped ptosis of the right upper eyelid. (b) and (c) Coronal (b) and Axial (c) CT scan shows a lacrimal gland mass with bony remoulding suggesting chronicity but no bony erosion.

#### Case report

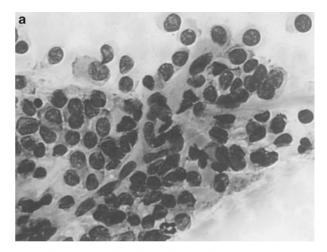
A 14-year-old boy had a 3-year history of intermittent swelling of the right eyelid.

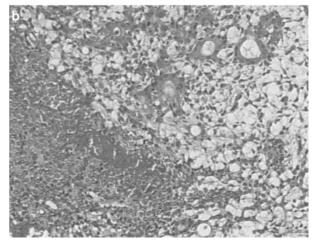
This had become progressively worse over the last 6 months. It was unresponsive to broad-spectrum antibiotics prescribed by his general practitioner for a presumed infectious dacryoadenitis.

Examination revealed normal visual acuity in both eyes, an S-shaped ptosis of the right eyelid and mild

erythema (Figure 1a). A firm nontender immobile mass was palpable at the superolateral rim extending from the lacrimal fossa. There was 2 mm of proptosis and ocular motility was normal. A CT scan revealed a well-circumscribed mass (Figure 1b and c) in the lacrimal fossa. There was bony remodelling of the fossa suggesting chronicity, although no evidence of bony erosion. A fine-needle aspiration cytology using a 23 gauge  $0.6 \, \mathrm{mm} \times 30 \, \mathrm{mm}$  needle was performed as an outpatient procedure. Cytologically, the aspiration showed a cellular smear consisting of plasmacytoid myoepithelial cells with little myxoid stroma and no evidence of malignancy. This was consistent with a pleomorphic adenoma of the lacrimal gland (Figure 2a).

The patient had excision of the tumour *in toto* with the capsule intact by a lateral orbitotomy approach and made an uneventful recovery. Macroscopically, the





**Figure 2** (a) FNAC of the lesion shows many plasmacytoid myoepithelial cells and some pink stained myxoid stroma. No epithelial cells are present in this field (Giemsa stain). (b) Histology of the lesion shows a few ductules embedded in myxoid stroma on the right and a proliferation of plasmacytoid myoepithelial cells on the left (H and E stain).



tumour measured  $40\,\mathrm{mm}\times40\,\mathrm{mm}\times30\,\mathrm{mm}$ . Histologically, the tumour was a cellular lesion with a few ductules lined by benign epithelial cells and many plasmacytoid myoepithelial cells, and myxoid stroma focally, consistent with a cellular pleomorphic adenoma (Figure 2b).

#### Discussion

Pleomorphic adenoma typically presents in middle age and is rare in childhood. It usually manifests as a slowly progressive, painless superotemporal mass without bony erosion.

There are only eight cases reported of pleomorphic adenoma in childhood. Dacryoadenitis accounts for most cases of an enlarged lacrimal gland in children. The clinical appearance of recurrent eyelid erythema in our case suggested an inflammatory process also. In two similar case reports of pleomorphic adenoma in childhood, signs of intermittent eyelid swelling were present for extended periods, as long as 4 years, and were attributed to presumed allergy.

A fine-needle aspiration cytology (FNAC) established the diagnosis in this case. This was a rapid, accurate, and valuable tool for tissue diagnosis.

An open incisional biopsy is not recommended for a suspected pleomorphic adenoma as removal with an intact capsule has prognostic implications. The likelihood of recurrence within 5 years is 3% if the lesion is removed with an intact capsule. This compares to a 30% chance of recurrence within 5 years if the lesion is incompletely removed or the capsule is not intact.<sup>3</sup>

Although pleomorphic adenoma of the lacrimal gland is rare in childhood, it must be considered in the differential diagnosis of an expansile lacrimal fossa mass in this age group.

## References

- 1 Shields CL, Shields JA, Eagle RC, Rathmell JP. Clinicopathologic review of 142 cases of lacrimal gland lesions. *Ophthalmology* 1989; **96**: 431–435.
- 2 Factorovich EG, Crawford JB, Char DH, Kong C. Benign mixed tumour (pleomorphic adenoma) of the lacrimal gland in a 6-year-old boy. Am J Ophthalmic 1996; 122: 446–447
- 3 Font RL, Gamel JW. Epithelial tumours of the lacrimal gland; an analysis of 265 cases. In: Jakobiec FA (ed). *Ocular and Adnexal Tumours*. Aesculapius Publishing Co: Birmingham, Ala, 1978, pp 787–805.
- 4 Mercado GJ, Gunduz K, Shields CL, Shields JA, Eagle JA, Eagle RC. Pleomorphic adenoma of the lacrimal gland. Arch Ophthalmol 1998; 116: 962–963.
- 5 Sanders TE. Mixed tumour of the lacrimal gland. Arch Ophthalmol 1939; 21: 239–260.

- 6 Cates AC, Manners RM, Rose GE. Pleomorphic adenoma of the lacrimal gland in a 10 year old girl, a case report. Br J Ophthalmol 2002; 86(2): 249–250.
- 7 Tsunoda S, Yabuno T, Sakaki T, Morimoto T, Moshida T, Hirabayashi M et al. Pleomorphic adenoma of the lacrimal gland manifesting as exophthalmos in adolescence. Neurol Med Chir 1994; 34: 814–816.

S Fenton<sup>1</sup>, DMDS Sie Go<sup>2</sup> and MPh Mourits<sup>1</sup>

<sup>1</sup>Orbital Unit Department of Ophthalmology University Medical Centre, PO Box 85500 Utrecht 3508 GA, The Netherlands

<sup>2</sup>Department of Pathology University Medical Centre, PO Box 85500 Utrecht 3508 GA, The Netherlands

Correspondence: MPh Mourits

Tel: +31 30 250 7888 Fax: +31 30 250 5417

E-mail: M.P.Mourits@oogh.azu.nl

Sir,

Double jeopardy; brain abscess and subdural empyema presenting with painful enlargement of orbital varices in a patient with known encephalocele

Eye (2004) 18, 79-81. doi:10.1038/sj.eye.6700494

Orbital varices are uncommon hamartomas¹ and, in some cases, form part of a more widespread facial or cranial vascular anomaly. Other systemic pathology is very rare, although we have recently described 10 cases with associated cranial anomalies or encephalocoeles,² a previously undescribed finding. We present a patient with both encephalocoele and orbital varices, in whom a severe intracerebral abscess and subdural empyema developed spontaneously, a life-threatening condition not previously known to present with enlargement of orbital varices and proptosis.

## Case report

A 34-year-old white woman presented in March 2002 with a 3-day history of severe headache, marked right proptosis (Figure 1a) with restricted ductions, but normal vision with no evidence of optic neuropathy. Her optic discs and intraocular pressure were normal. She had first presented at 1 year of age with mild right proptosis, this remaining unchanged over about 20 years. At age 22, she attended the Orbital Clinic at Moorfields Eye Hospital with increased painful non-axial proptosis, gross caruncular prolapse, and conjunctival chemosis. Orbital