priately. Small lesions can be observed as spontaneous involution may occur, larger lesions require simple excision; histological confirmation of the diagnosis is advisable.[3]

Shields *et al.*[4] reviewed 57 consecutive biopsies of lesions of the caruncle seen in the Wills Eye Hospital pathology department from 1977 to 1985. Pyogenic granulomas accounted for 9% (5 cases) of all caruncle masses. Two cases were secondary to strabismus surgery on the medial rectus and involved the conjunctiva as well as the caruncle. Ferry[5] reviewed 100 consecutive cases of pyogenic granulomas involving the eye or ocular adnexa diagnosed in the ophthalmic pathology laboratory at the Medical College of Virginia at Mount Sinai School of Medicine. The correct diagnosis was made clinically in only 42% of cases and they were commonly confused with suture granuloma'. Predisposing factors were identified in 87% of cases (chalazion 42%, ocular/adnexal surgery 40%, accidental trauma in 5%); no predisposing factor was determined in 13%. It has also been suggested that pyogenic granulomas of the lacrimal sac occur more frequently than is reflected in the literature.[6]

Histologically these lesions are lobulated cellular haemangiomas with a fibromyxoid matrix. Each lobule consists of a larger vessel, often with a muscular wall, surrounded by congeries of small capillaries.[7] Stromal oedema is usually prominent. Mitotic activity in endothelial cells and fibroblasts may be conspicuous. Most pyogenic granulomas are altered by secondary inflammatory changes. Secondarily invading microorganisms are occasionally present in the superficial aspects of ulcerated lesions.[5]

Conclusions

Pyogenic granulomas can be primary or secondary. Clinically they are often misdiagnosed, but histopathologically they are a well-recognised entity. Excision and laboratory examination of the lesions that do not clear spontaneously is important as they may mimic various primary or secondary malignant neoplasms.[8–12] From the clinician point of view we believe that a more accurate name for this condition, perhaps 'polypoid capillary haemangioma' or 'lobular capillary haemangioma' as already suggested for similar lesions affecting the lacrimal sac,[6] may well reduce some of the confusion regarding its clinical diagnosis.

David Kent
Wagih Aclimandos

King's College Hospital
Denmark Hill
London SE5 9RS, UK

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Sir,

Paget's Disease Presenting with Exophthalmos

Ocular complications of Paget's disease may include optic atrophy, muscle and nerve palsies, angioid streaks and papilloedema. Exophthalmos occurs rarely and has not been described as a presenting feature. We report the case of an 89-year-old woman with extensive Paget's disease of the skull and orbits who presented with visual loss and proptosis.

Case Report

An 89-year-old woman was referred to the ophthalmology service because of a gradual reduction in vision and increasing proptosis in the right eye over several months. She had also become increasingly deaf and had been treated conservatively 6 months earlier for non-union of an old spiral fracture of the left humerus.

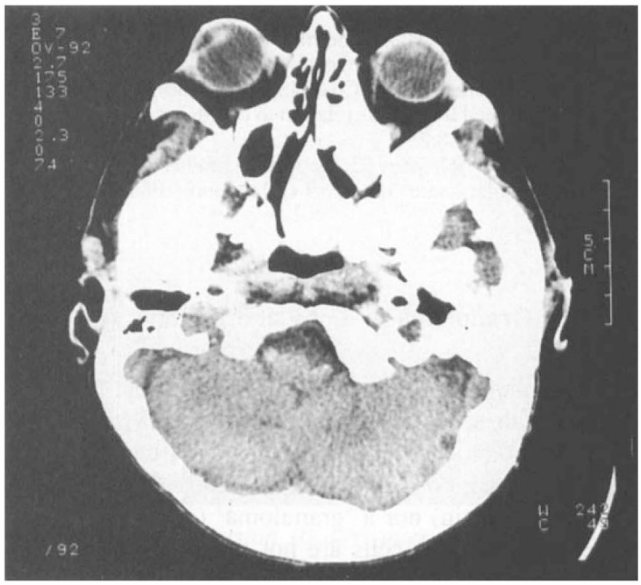

Fig. 1. *Computed tomography scan showing Pagetic skull and displacement of the right globe.*

Ocular examination revealed vision of 2/60 right eye and 6/36 left eye. There was right proptosis (22 mm right and 15 mm left). The intraocular pressures were normal, there was a right afferent pupillary defect, nuclear sclerosis and funduscopy revealed a pale right optic disc. There were no other retinal changes. Thyroid function tests and serum calcium were normal (2.21 mmol/l) but alkaline phosphatase was markedly raised (201 KA units). A skull radiograph revealed extensive Paget's disease. Orbital B-ultrasonography was normal. Computed tomography (Fig. 1) demonstrated extensive basilar invagination but no evidence of pituitary macroadenoma. Maxillary and ethmoid sinus involvement reduced the volume of the orbits causing displacement of the globes anteriorly, particularly on the right. Visual evoked responses were consistent with compression of the right optic nerve.

The patient was commenced on oral disphosphonates and, as cataract surgery was declined, registered as partially sighted and referred for low vision and auditory rehabilitation.

Discussion

Ocular complications of Paget's disease have been recognised since James Paget reported that 4 of the 23 patients he had followed became blind. Extraocular disorders are often due to compression and have included optic atrophy, extraocular muscle and nerve palsies, ptosis, nasolacrimal duct obstruction and papilloedema. Intraocular complications include corneal opacities, cataract, angioid streaks and macular degeneration. Retinal artery occlusion, retinal haemorrhage and chorioretinitis may also occur. The visual fields are usually normal except in cases of optic atrophy or macular degeneration.[1,2]

Exophthalmos occurs rarely and its imaging in Paget's disease by computed tomography has not previously been described. The mechanism has been attributed variously to direct orbital volume reduction, a possible exophthalmos-producing substance and back pressure from the cavernous sinus.[3]

S. Kheterpal, MA MRCOphth
S. M. Downes, FRCOphth
E. M. Eagling, FRCS, FRCOphth

Birmingham and Midland Eye Hospital
Church Street
Birmingham B3 2NS
UK

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Sir,

Bacterial Keratitis Following Excimer Laser Photorefractive Keratectomy: A Case Report

The 193 nm argon fluoride excimer laser as been used since 1989 to correct myopia in sighted eyes. Its human use was preceded by animal, blind eye and partially sighted eye studies. We report a case of *Streptococcus pneumoniae* keratitis following excimer laser photorefractive keratectomy (PRK). To the best of our knowledge this complication has not been previously reported.

Case Report

The patient, a 71-year-old man, presented to the casualty department of our hospital with a 1 week history of severe pain, photophobia and blurring of vision of his left eye. He had undergone excimer laser PRK using a 4 mm ablation zone at another centre to correct his left myopia 9 weeks earlier. Clobetasone butyrate (Eumovate, Cusi) had been prescribed four times a day to his left eye post-operatively and was still being instilled. He was a high myope with a best corrected visual acuity of 6/36 right eye, 6/12 left eye (the right eye was amblyopic). His pretreatment refraction was −19.00 D/+4.00 D×95 right eye, −15.00 D/+1.50×115 left eye.

His corrected visual acuity on presentation was 6/36 right eye, counting fingers at 1 m left eye. Examination of the left eye revealed a central circular corneal stromal abscess measuring 4 mm × 4 mm with an overlying epithelial defect (Fig. 1). There was evidence of mild blepharitis in either eye. The right cornea was clear and examination of the fundus revealed extensive myopic chorioretinal degeneration. The abscess was scraped and the patient commenced on intensive topical gentamicin (1.5%), cefuroxime (5%) and cyclopentolate (1%). The corneal scrape showed a profuse growth of *Streptococcus pneumoniae* sensitive to cefuroxime and the treatment was modified accordingly. He was also treated for his blepharitis. The abscess resolved on intensive topical treatment leaving a central corneal scar (Fig. 2). The visual acuity in the left eye 4 months after presentation was counting fingers at 1 m with a refraction of −13.00 D.

Discussion

Photorefractive keratectomy (PRK) with the excimer laser

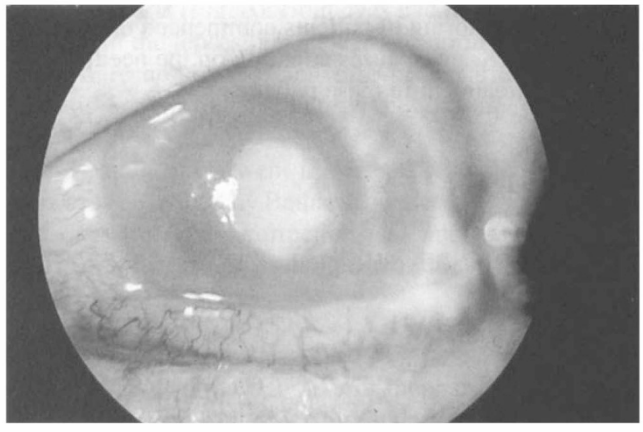

Fig. 1. *Left eye at presentation, showing the central corneal abscess.*