

gested that the vitreous was less deformable than the sclera and hence explained the traction tear at the vitreous base. Others<sup>6</sup> found that velocity of corneal displacement leading to high-speed shock waves may be more important than total kinetic energy imparted to the eye. In the case we report it must be assumed that the jet remained narrow since there were no injuries on the face. All the available energy would therefore have been delivered to the eye.

The avulsion of the vitreous in this case was restricted to the area of retinal tear with the remainder of the posterior hyaloid face attached to the retina. This explains the lack of progression to retinal detachment over the 4 days prior to surgery and meant that neither buckling nor vitrectomy and tamponade was necessary.

This case illustrates the importance of adequate eye protection when working with machines capable of producing high-pressure jets. It also emphasises the need for careful examination of any eye injured by such a jet with scleral indentation as soon as possible.

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Sir,

#### Pyogenic Granuloma or Lobular Capillary Haemangioma

The presentation of 'pyogenic granuloma' can be quite dramatic as these lesions may increase in size very rapidly and not uncommonly bleed. The lesion is neither 'pyogenic' (as there is no evidence that it is caused by a specific infective organism) nor a 'granuloma' (as mononuclear, epithelioid and giant cells are not a feature of the condition). The clinical diagnosis is often incorrect. This may well be to some extent a consequence of the misnomer or it may be due to the fact that the condition is poorly docu-

mented in the ophthalmic literature. We present a case of a large 'pyogenic granuloma' affecting the left upper lid. We propose altering the nomenclature to 'polypoid capillary haemangioma' or 'lobular capillary haemangioma', a histopathologically more accurate term.

#### Case report

A 20-year-old African woman presented with a growth on the left upper lid margin which had developed over the previous 3 weeks. There had been a rapid increase in size and the lesion had bled on a few occasions. There was no history of trauma or any previous lid problems. The lesion was approximately 15 mm in diameter, pedunculated, smooth and spherical and looked vascular (Fig. 1). Excision was performed under local anaesthetic and there was no significant bleeding. Histopathological examination confirmed a diagnosis of 'pyogenic granuloma'.

#### Discussion

'Pyogenic granulomas' occur on the skin or mucosa. The lesions may be pedunculated or sessile and are usually smooth, vascular and often bleed.<sup>1</sup> The rapid rate of growth and the tendency to bleed can be alarming.<sup>2</sup> It is therefore important to make the correct diagnosis in order to reassure the patient and manage the condition appro-



(a)



(b)

Fig. 1. (a), (b) Pyogenic granuloma.

privately. Small lesions can be observed as spontaneous involution may occur, larger lesions require simple excision; histological confirmation of the diagnosis is advisable.<sup>3</sup>

Shields *et al.*<sup>4</sup> 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<sup>5</sup> 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.<sup>6</sup>

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.<sup>7</sup> 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.<sup>5</sup>

### 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.<sup>8-12</sup> 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,<sup>6</sup> may well reduce some of the confusion regarding its clinical diagnosis.

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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.