post-brachytherapy by Kellner et al. but it is rare, being seen in three out of 1300 patients in that series. The authors postulated that the location was in the residual necrotic tumour mass. A literature search failed to provide similar echographic cases of calcification/ossification 'within' tumours.

Calcification can be classified into (a) dystrophic type – calcium deposition in degenerative, desy, or dying tissue – for example, in long standing traumatic cataracts, retinal detachment, phthisis bulbi, band keratopathy, and in retinoblastoma; (b) metastatic type – calcium is deposited in undamaged tissue – for example, hyperparathyroidism, vitamin D intoxication; (c) metaplastic type – retinal pigment epithelium (RPE) may undergo metaplastic change or act as an inducer and cause calcium deposits and bone formation inside the eye – for example, osseous choristoma.

Of interest in our case is the intense vascularity of the tumour as seen on B-scan and standardised A-scan and also the lack of tumour necrosis, which would have been implicated as a cause of calcification. The origin of calcification is therefore uncertain. It may have arisen from RPE or Bruch's membrane at the site of tumour penetration. This is supported by the presence of calcification in Bruch's membrane and fibrosis immediately adjacent to the area of calcified bone. Alternatively, it may have developed in remnants of disorganised retinae before the tumour had penetrated Bruch's membrane. Malignant transformation in a long standing naevus with overlying calcification is also a remote possibility. In conclusion, large calcification/ossification 'within' the interior of choroidal melanoma is a rare phenomenon. Echography is a sensitive method in its detection. The presence of such calcification should not exclude the diagnosis of choroidal melanoma provided its other characteristic acoustic features are identified.

CASE REPORT
A 70-year-old man presented with a swelling on the left lower eyelid of about 3–4 months' duration. A lateral canthal lesion, clinically suspicious for a cystic basal cell carcinoma, was removed under local anaesthetic. A skin ellipse 1–1×0.4 cm to a depth of 0.4 cm was received in the laboratory. A central slightly elevated tan-coloured non-ulcerating 0.4×0.3 cm nodule was evident on its surface. Histological examination revealed a benign multicellular cyst in the dermis lined by one or two layers of flat to cuboidal epithelial cells showing some apocrine features consistent with a sudoriferous cyst associated with a Moll's gland. The overlying epidermis was unremarkable. Adjacent to this was a dilated cystic space lined by epithelium in which there were numerous round to oval separate eosinophilic structures ranging in size from 40 to 200 μm (Fig 1).

These were acellular, laminated with radial striations, non-birefringent with polarised light and negative with Perl's, periodic acid Schiff, Congo red, and Von Kossa stains. The appearance was that of Liesegang rings (Fig 2).

COMMENT
The largest reported series of Liesegang rings comprised 29 cases, the majority being in the kidney. In all, 10 were initially misdiagnosed as parasitic, the most common being the giant kidney worm Dicrocoelium dendriticum in four of the 12 renal cases. Sniege et al. described two further renal cases, initially thought to be parasitic, and pointed out the differences in appearance from parasites.

Of the three ocular cases reported, two occurred in the conjunctiva: one was in a woman aged 42 years who presented with a sore eye; the other in a male whose age and

Figure 1 Low power views showing edge of multicellular sudoriferous cyst (left, arrowhead) and adjacent cystic space containing multiple ovoid bodies (right, arrow). Haematoxylin and eosin, ×10.

Figure 2 High power detail showing laminated structure with cross striations. Haematoxylin and eosin, ×200.
woman aged 42 years who presented with a sore eye; the other in a male whose age and presentation were not stated. Pathological examination of biopsies in both showed ‘cysts’ in which an initial diagnosis of ‘concretions’ in the former and ‘grains’ in the second was made. The third was a man aged 94 years who presented with a senile ectropion of the eyelid. Biopsy revealed a cyst and initially a diagnosis of nematode infestation was made.

The appearance of the structures in the current case, along with the lack of any organoid structure resembling known parasitic infestations in association with a cyst of Moll’s glands, satisfies the criteria for Liesegang rings.

When considering the differential diagnosis of unusual cystic lesions of the eyelid the oculopathologist needs to be aware of Liesegang rings as a separate entity not related to parasitise.

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Figure 1 At presentation the left upper lid is piotic and has a bulgy appearance as a result of amyloid deposition.

Surgical management of primary localised conjunctival amyloidosis causing ptosis

EDITOR,—Primary localised conjunctival amyloidosis characteristically presents as an enlargement or swelling of the eyelid which is frequently associated with spontaneous haemorrhage.1 The condition usually presents in older adults, often bilaterally.

Typically, there are solitary or multiple, firm, rubbery, well vascularised, waxy appearing, painless, fusiform or polyoid subconjunctival elevations. If the tarsal plate and adjacent muscle and subcutaneous layers are infiltrated, the eyelid may be diffusely thickened. Ptosis may result from the weight of the amyloid and infiltration or stretching of the levator palpebrae superioris complex.

The surgical management for this condition has not been well described and indeed surgery is often avoided for fear of severe haemorrhage. We present a case in which a meticulous excision of the amyloid mass using a microdiathermy needle, combined with an advancement of the levator aponeurosis, provided a good functional and cosmetic result.

CASE REPORT

A 70-year-old white woman was referred for a second opinion on her longstanding bilateral ptosis. In 1982 the patient had developed a gradual swelling of her left upper eyelid which gradually resolved over a 2 week period and was associated with the development of a bruise in the same region. Over the course of the next 3 years the patient suffered recurrent spontaneous haemorrhages into both upper lids with extensive bruising. Both lids became increasingly swollen and a secondary ptosis developed. In 1985 a left posterior approach levator resection was attempted but the procedure was abandoned because of severe haemorrhage. In 1990 a Fasanella-Servat procedure was performed by another surgeon on the left upper lid as the ptosis was obscuring the pupil. This procedure gave a functional improvement for 3 years. Histopathological examination of the excised tarsocconjunctiva showed the presence of amyloid tissue.

On examination the patient had a bilateral ptosis with a palpebral aperture of only 3 mm on the left side and 5 mm on the right. She had a bulky appearance to both upper lids with firm, painless, rubbery swellings palpable in and above the upper tarsal plates. The swelling was more extensive in the left upper lid (Fig 1). There was evidence of subcutaneous haemorrhage in and around the left upper lid. The diffuse thickening of the upper lids made eyelid eversion difficult. Levator function was 8 mm on the left side and 10 mm on the right.

The patient underwent an exploration of the left upper lid via a skin crease incision under general anaesthetic. The surgery was performed using a ‘Colorado’ microdiathermy needle which permitted excellent dissection of the tissues with minimal bleeding. The amyloid material was exposed and dissected from the underlying tarsus and conjunctiva. The levator aponeurosis was involved in the lower two thirds. This was excised and the remaining healthy levator aponeurosis advanced onto the tarsal plate. The skin incision was closed and a pressure dressing applied for 24 hours.

Histopathological examination and immunohistochemical analysis of the material removed at surgery confirmed that the mass was composed of AL type amyloid tissue which has previously been identified in deposits of primary localised amyloidosis.2 3 Positive staining occurred with antibodies to kappa and lambda light chains.

Postoperatively the patient made an uneventful recovery. The left palpebral aperture measured 7 mm. There was no lagophthalmos. Both the functional and cosmetic results were good. The patient remains unchanged after 12 months’ follow up (Fig 2).

COMMENT

In the ophthalmic literature there has been little discussion of the management options and operative approaches for this condition. Small, localised lesions have previously been treated by en bloc resection, but in advanced cases surgery is often not attempted because of the potential risk of haemorrhage from the fragile blood vessels typically associated with the lesions, and the extent of infiltration rendering resection impractical. Recently, Patrinely and Koch described a method of treating advanced amyloid deposits by preserving the anatomical planes of the eyelid and debulking the amyloid mass with a spooned curette.4 This method appears to be effective in reducing the size of the amyloid mass in advanced cases.

The above case report illustrates that resection of large areas of amyloid is technically possible with preservation of normal eyelid tissue, and avoidance of haemorrhagic sequelae. At the same time it is possible to correct a secondary ptosis safely and satisfactorily.

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Orbital varix in Grönblad-Strandberg syndrome

EDITOR,—Pseudoxanthoma elasticum (PXE) is an uncommon hereditary disorder of connective tissue, characterised by fragmentation of elastic fibres in various tissues. This abnormality accounts for its most common manifestations, including angiod streaks (breaks in Bruch’s membrane), reticulated skin lesions (plucked chicken appearance in neck and axillae), and vascular abnormalities.1 The association of PXE and angioid streaks is known as Grönblad-Strandberg syndrome.2 Orbital varices are venous malformations characterised by a weakened vessel wall and often by an interrupted elastic lamella. This combination with PXE has never been reported before. We describe a case of Grönblad-Strandberg syndrome, where an orbital varix was the presenting sign.

CASE REPORT

In October 1993 a 22-year-old woman was referred for the evaluation of a painless superior medial mass, arisen since the age of 4