Primary sebaceous carcinoma of the lacrimal gland

EDITOR,—Sebaceous carcinoma is a rare primary neoplasm of the lacrimal gland and to the best of our knowledge only five cases have previously been reported.1–3 Sebaceous carcinoma of the orbit more commonly occurs as secondary invasion from the eyelid but may occur as metastatic spread from elsewhere in the body. We report a case of primary sebaceous carcinoma of the lacrimal gland and discuss the histological diagnosis and management of the disease.

CASE REPORT
A 35 year old woman was referred with a 6 month history of a gradually enlarging palpable mass arising in the left superotemporal orbit and causing painless, and progressive diplopia. On examination she had a palpable, hard, fixed, left superotemporal orbital mass, a non-axial proptosis, and hypoglobus. The eyelids were normal. Examination of ocular motility revealed a restriction of left elevation. In addition, she was found to have an enlarged, painless ipsilateral preauricular lymph node. Computed tomograph (CT) and magnetic resonance imaging (MRI) scans showed the mass was arising from the lacrimal gland (Fig 1).

Figure 1 (Top) Coronal fluid attenuated inversion recovery (FLAIR) image showing a large lacrimal gland mass. The tumour is well demarcated and shows minimal heterogeneity. (Bottom) Axial post-contrast T1 weighted image with fat suppression. The tumour is again seen to be well demarcated and shows marked homogeneous enhancement.

A transseptal biopsy of the mass was performed and histological examination showed tissue infiltrated by carcinoma in which the neoplastic cells were large and contained prominent nuclei. Many cells were vacuolated and contained lipid as confirmed by fat stains on unprocessed, fixed material. Immunohistochemistry revealed strongly positive staining for epithelial membrane antigen (EMA) but negative staining with anti-cytokeratin, indicating the carcinoma to be of sebaceous origin (Fig 2). Metastatic spread from another primary site was excluded by general physical examination, chest x ray, mammography, and isotopic bone scan undertaken by an oncologist.

A left orbital exenteration with left superficial parotidectomy and excision of left cervical lymph nodes was performed. Histological examination of the exenteration specimen showed a 35 × 30 × 18 mm tumour arising in the region of the lacrimal gland, which had been entirely replaced by sebaceous carcinoma, with only a small focus of ductal tissue being present at the margin of the tumour at one point. There was no involvement of the overlying periorbital skin, eyelid, or conjunctiva. The preauricular lymph node contained metastatic deposits, although her cervical lymph nodes were free from metastatic disease.

Postoperatively she underwent radiotherapy to the involved area and the orbit was allowed to granulate and re-epithelialise. Nine months after the surgery an isolated soft, mobile node was noted in the neck. This increased in size over 2 months and was found to be recurrent metastatic carcinoma on fine needle aspiration biopsy. Radical dissection of nodes in the neck confirmed involvement of 30–40 nodes and the patient received further radiotherapy. Six months after this, a swelling in the parotid region without lymphadenopathy again showed recurrent tumour. This lesion responded well to radiotherapy alone. Since then she has achieved good cosmesis with an orbital prosthesis and at the time of writing 3 years after original diagnosis she remains well with no signs of residual tumour.

COMMENT
Primary sebaceous carcinoma of the lacrimal gland possibly arising from heterotopic sebaceous tissue is extremely rare and must be differentiated from secondary invasion of the orbit by a primary eyelid tumour or metastatic spread from other areas of the body. The tumour is highly malignant and metastases to the preauricular and deep cervical lymph nodes occur early in the disease. Orbital exenteration is required and in addition parotidectomy and cervical lymphadenectomy combined with postoperative radiotherapy should be considered as part of the management. The prognosis in previously reported patients was poor with local recurrences and metastases leading to death within 1 year. One previous patient survived to 22 months postoperatively.4 At the time of writing our patient is the first to show 3 year survival without evidence of further recurrence.

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Congenital circumscribed choroidal haemangioma associated with infantile hepatic haemangioendotheliomatosis

EDITOR,—Choroidal haemangiomas are vascular hamartomas that occur in two distinct forms, circumscribed and isolated, or diffuse, as seen in the Sturge-Weber syndrome.1 Likewise, hepatic haemangioendotheliomas are benign hamartomatous tumours composed of anastomosing vascular channels lined with endothelial cells. Infantile haemangioendotheliomas (IHE) of the liver are congenital lesions noted at birth or during the first 6 months of life. Hepatomegaly, congestive heart failure, and haemangiomas of the skin combine to form the classic symptomatic triad.2 To our knowledge, this is the first report of a congenital circumscribed choroidal haemangioma and the first noted association of a circumscribed choroidal haemangioma with a visceral neoplasm.

CASE REPORT

A 3.75 kg male with an uncomplicated prenatal history was born at full term by normal spontaneous vaginal delivery. At birth, the patient was noted to have a single 1 cm diameter cutaneous haemangioma in the left upper extremity. There was no family history of ocular diseases or any haemangioma-tous syndromes. The patient's early postnatal course was complicated by hepatic and congestive heart failure. During this time, his cutaneous haemangioendotheliomas had increased in number ranging from 2 mm to 1 cm in diameter involving his right upper extremity, occiput, and chest wall. An ophthalmological examination was requested to evaluate these lesions combined with the patient's normal visual acuity without progression of the lesion.

COMMENT

The pathogenesis of haemangiomas remains largely unknown. Histologically, the hepatic and cutaneous haemangioendotheliomas are composed of vascular channels lined by endothelial cells separated by connective tissue septae.3 Funduscopic examination revealed normal discs, vessels, and retinal peripherey in both eyes. The right macula was normal without pigmentary abnormalities but the left macula revealed a raised choroidal lesion with an orange coloration and reactive pigmentary changes without retinal, detachment or subretinal fluid. On A and B-scan ultrasonography the maximum height of the lesion was 2.1 mm and the reflectivity of the lesion was high. The clinical and ultrasonographic appearance was most consistent with the diagnosis of a circumscribed choroidal haemangioma. Given the patient's normal visual acuity and absence of subretinal fluid, observation was recommended in lieu of laser or radiation therapy. Follow up examination at 15 months of age revealed normal visual acuities without progression of the lesion.

Echographic localisation of corticosteroid after retrobulbar injection

EDITOR,—Long acting pericocular corticosteroids are commonly used to treat cystoid macular oedema (CME) resulting from ocular inflammation or cataract surgery that does not respond to topical therapy. Drug localisation in the macular area is considered important for optimal therapeutic effect. In postcataract CMO refractory to topical therapy, corticosteroids delivered by retrobulbar and posterior sub-Tenon's injections are equally effective.4 Steroids given by sub-Tenon's injection have previously been shown to localise to the macular area.5 Retrobulbar anaesthetic injections have been shown to localise in the intracranal space, but not precisely to the macular area.6 We performed ultrasonography after retrobulbar steroid injection to confirm drug localisation in the macular area.

CASE REPORT

Sixteen patients with chronic CMO secondary to sarcoid, idiopathic uveitis, or cataract surgery (Irving-Gass syndrome) were included in the study. The main inclusion criteria were presence of a visually significant form of CMO that had either failed topical anti-inflammatory treatment, or was deemed clinically severe enough to warrant systemic or pericocular injections of corticosteroids prima-rily, and willingness to sign informed consent. The main exclusion criteria was refusal to consent to the procedure.

Each eye was injected with 1–2 ml of 40 mg/ml triamcinolone acetonide mixed with 0.5 ml of 2% lignocaine (lidocaine) without adrenaline (epinephrine) using a sharp 1/2 inch 25 gauge needle. The needle was inserted at the inferotemporal aspect of the lower lid aiming in the direction of the orbital apex. The patient was asked to look straight ahead while the globe was balloted towards the superi-or orbit with the index finger of the non-injecting hand. Once the needle was positioned in the muscle cone near the posterior pole, the solution was slowly injected.

B-mode ultrasound was performed within 30 minutes of the retrobulbar injection. After topical proparacaine (proparacaine) was given, a methylcellulose coupling agent was placed on the ultrasound transducer face, and the transducer was directly applied to the ocular surface. Standard longitudinal, vertical transverse, and axial planes were imaged (Figs 1 and 2). In 15 of 16 (94%) eyes, the steroid was localised to the macular area defined as the portion of the posterior pole bounded by the optic nerve, major temporal arcades, and 3 mm temporal to the fovea. In eyes where the bolus localised to the macular area, the mean distance between the most anterior aspect of

Early wound dehiscence with use of hydroxypatite orbital implant covered with calf pericardium

Eston.—Enucleation techniques continue to evolve. While sclera covered hydroxyapatite orbital implants have been quite effective, two major limitations have led us to study other covering materials. One, while there has been no documented human immunodeficiency virus transmission, several patients have expressed concerns about the use of allogeneic sclera because of that issue. Two, in some settings obtaining cadaver donor tissue in a timely manner can be vexing.

Processed calf pericardium has been used in a number of clinical settings as diverse as vascular grafts and neurological surgical patches. Animal ophthalmic data with these materials have shown little untoward effect. While theoretic concerns about prion disease can be raised, we believe that no evidence of this problem has been reported from over 90,000 human implantations.1 While this material is a xenograft that is stored in glutaraldehyde, we are unaware of significant ophthalmic reactions on the basis of either parameter.

I performed a phase I-II trial with commercially available pericardium in 14 patients who underwent enucleations for large intraocular tumours. I compared the results with 126 previous enucleations in similar patients by the same author. Placement of allogeneic scleral wrapped HA implants. When two of these 14 cases developed early, apparently non-infective suture line breakdown (compared with none previously) I stopped the use of this approach.

CASE REPORT
In a phase I-II trial 14 eyes of 14 patients, with large intraocular tumours that were not amenable to eye salvage techniques, underwent enucleation. Three patients had large, unilateral retinoblastomas and 11 had uveal melanomas. In the latter group, eight had primary enucleations and three had their eye removed at relatively long intervals after either brachytherapy or proton radiation. The mean age was 49 years old with a range of 1.3–81 years.

Enucleations were performed in a standard manner, as described elsewhere, using double armed 5-0 polyglycolic and polyactic acids (Vicryl) sutures to imbricate each of the recti muscles. An 18–22 mm HA implant was soaked in a solution of antibiotic-bupivacaine (Marcaine) solution for 5 minutes then covered with a preshaped Oculoguard calf pericardium (Bio-vascular, Inc, St Paul, MN, USA). The open end of the preformed, bag-shaped material was placed posteriorly and was partially closed with interrupted 4-0 polyglycolic and polyactic acid (Vicryl) sutures. A scalpel was used to create four windows, each approximately 3 × 5 mm located at the equator. After haemostasis was achieved the recti muscles were each attached to the anterior edge of their respective 3 × 5 mm window. Tenon’s layer was then closed with a running 4-0 polyglycolic and polyactic acids (Vicryl) circle suture, and overlying interpreted 4-0 polyglycolic and polyactic acids (Vicryl) sutures. The conjunctiva was closed with a running 6-0 plain gut. The retrospective control group was operated on in an identical manner except allogenic sclera was used instead of calf pericardium.

Patients who received calf pericardium covered implants have been followed for 7–20 months following surgery. No wound complications have been noted except for one socket has been drilled for placement of an integrated implant. In two adults we noted breakdown and retraction of the anterior suture line within 1 month of surgery. In neither of the two cases in which breakdown of the suture line in the first month postoperatively was there oral ocular radiation, pre-existing conditions, or untoward events noted at surgery. In both cases cultures were negative. In the first case, since I had never had this complication in the first month after an enucleation, I assumed that the suture material had broken and took the patient back to the operating room to close the defect. A culture was negative, and I easily resutured the conjunctival edges, but it again broke down 1 week later. In that patient and the second case that presented with a slightly larger defect 2 weeks after enucleation, we removed the anterior face of the calf pericardium that covered the HA implant, and the overlying conjunctival defect was closed with a dermal graft. The first patient has done well. The second case had recurrent breakdown anteriorly so that we removed the implant. No pathogenic organisms were seen.

In the historic control group (126 cases), who had scleral covered HA implants, I had no cases with this type of complication in the first 6 months after surgery.

COMMENT
A large variation in the incidence of postenucleation complications have been reported. Using the technique outlined above, I have not had an early (<6 months) wound dehiscence or anterior surface breakdown. It is uncertain why we have developed this complication in 14% of cases operated on with bovine pericardium. It is likely that either these patients had a reaction to the xenograft or to the preservative material (although the pericardium is carefully washed in saline solution, bupivacaine (Marcaine) and antibiotics before insertion). In some clinical investigations a higher incidence of early complications with scleral covered hydroxyapatite implants has been reported; these series report wound dehiscence between 5–30%1 while that higher incidence has been noted by others, it has not been my experience with a surgical technique that has been basically unchanged for several years.

The mechanism responsible for this early wound dehiscence is uncertain. In an animal study that compared bovine pericardium with homologous sclera there was significantly greater inflammation with the former material; all rabbits that received bovine pericardium wrapped implants had diffuse inflammation in the outer 20% of the material. It is unlikely that our patients had a subclinical infection (cultures were negative and histological studies showed no organisms) although we cannot completely rule out that possibility.

While there are a number of theoretical advantages with the use of calf pericardium instead of allogeneic sclera, the 14% incidence


References
of a significant complication has truncated my experience with this material.

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Wegener's granulomatosis as a cause of 
cicatrising conjunctivitis

EDITOR,—Wegener's granulomatosis is a mul-
tisystem disorder characterised by the classic 
triad of necrotising granulomas in the upper 
respiratory tract and the lung, a variable 
degree of systemic small vessel vasculitis, and 
a focal necrotising granulomoplerhinitis. A 
limit- ed form of Wegener's granulomatosis, with 
absence of glomerulonephritis, has been 
described.1 Ophthalmic complications occur in about 
30% of patients with biopsy proved disease.2 
Among these orbital pseudotumours ulcerations 
of the sclera and the cornea are observed most 
frequently and the histopathological findings have been described.3 Involvement of the conjunctiva and eyelids has also been 
observed,1 but progressive scarring of the conjunctiva 
and its sequelae has not been reported.

CASE REPORT
A 72 year old man was first seen at our 
department in November 1997 with bilateral 
conjunctivitis. His medical history had been uneventful until early 1987, when he de- 
veloped systemic illness with upper respiratory 
complaints and renal insu- 

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Figure 1 (a) Active granulomatous, 
haemorrhagic inflammation of the left upper 
tarsus in 1997. (b) Same area 2 years later. Note 
advanced scarring of the left upper tarsus causing 
entropion and trichiasis.

The patient was referred again in March 
1999 after he had su-

Figure 2 Asterisk indicates fibrous hyperplasia 
in the wall of a small artery as consequence of 
vasculitis (haematoxylin and eosin, ×440).

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An unusual presentation of diabetic 
neuropathy

EDITOR,—Diabetic neuropathy can present in 
numerous forms; as symmetrical sensory 
polyneuropathy, mononeuropathy, or as an 
autonomic neuropathy. The earliest functional 
change in diabetic nerves is delayed conduc-
tion velocity, the earliest histological change is 
segmental demyelination due to damage of 
Schwann cells. We report an uncommon but 
important presentation, which can easily be 
overlooked on clinical examination.

CASE REPORT
A 27 year old woman was referred to 
Moorfields Eye Hospital complaining of bilat-
eral ocular irritation and itchiness. There had been a gradual reduction in vision over the 
previous 18 months. This had not responded to a wide 
range of different topical medications. She had been an insulin dependent diabetic since 
the age of 11. History of control of her diabetes 
was good, on a regimen of subcutaneous 
Monotard and Actrapid. She had no other 
significant medical history.

On examination she was noted to have 
bilateral corneal erosions. Together with the 
usual blink rate and peripheral corneal thinning. 
Her visual acuity was recorded at 6/60 right, 
6/24 left unaided. It was also noted that she 
had complete corneal anaesthesia in both eyes. 
Basic neurological examination was oth-
erwise normal.

The patient had the typical appearances of a 
nutrotrophic epithelium. She was started on 
hyprosmollose 1% eye drops and chloram-
phenicol 1% eye drops four times daily, both 
permissive free to stabilise her epithelium, 
and this improved her symptoms and vision. 
Further progress was obtained with therapeu-
tic contact lenses, and her visual acuity improved to 6/18 in both eyes. Because of her
Corneal anaesthesia she was referred for full neurological investigation. Autonomic function tests were performed which revealed postural hypotension, bluntedpressor tests, and a blocked valsalva test. There was much reduced heart rate variability and the responses for her age were thought to be consistent with sympathetic and parasympathetic impairment. Her EMG and nerve conduction studies showed a mild sensory motor neuropathy. A sural nerve biopsy was offered but refused by the patient.

She is currently well maintained with sceral contact lenses and no other symptomatic manifestations of diabetic neuropathy.

**Comment**

Corneal anaesthesia can be physiological or pathological. Corneal sensation decreases with age, and is lower in females, especially premenstrually. Contact lens wear, and infection by herpes zoster and simplex, oedema and surgery will also reduce sensation. Congenital causes of corneal anaesthesia include corneal dys trophy and Riley-Day syndrome, and congenital corneal anaesthesia without an associated syndrome, which is presumed to be due to hypoplasia of the ophthalmic division of the trigeminal nerve. Systemic disease such as diabetes, myotonic dystrophy, scleroderma, and vitamin deficiencies are important causes of corneal anaesthesia, which can often be overlooked. Forty five per cent of diabetic patients had a degree of corneal hyposthesia when examined in a study of 130 patients published by Osman et al. There is little or no relation between the age of a diabetic patient and the observed decrease in corneal sensitivity. However, corneal sensitivity thresholds do rise with the duration of diabetes.

It has been suggested that diabetic peripher al neuropathy was due to occlusive vascular disease and nerve infarctions. More recent evidence suggests that common symmetrical distal polyneuropathy is due to segmental demyelination with associated or secondary axonal degeneration.

Recent studies show that there may be a potential to use topical neurotrophic growth factors for treatment for neurotrophic corneal ulceration. In a study of 14 eyes Lambiase et al treated neurotrophic corneal ulcers with topical nerve growth factor for 2 weeks. Corneal healing began within 2-14 days and all patients had complete healing of their ulcers after 10 days to 6 weeks.

Corneal anaesthesia may often be overlooked unless it is profound. It can be tested with cotton wisps or an anaesthesiometer. It is important to test the corneal sensation subjectively and objectively and also to test all four quadrants of the cornea.

This case raises three important points:

- **Chronically and irritable eyes should have their corneal sensation tested.** Corneal anaesthesia is easily overlooked by non-ophthalmologists and ophthalmologists alike, and the anaesthetic cornea represents a real risk of profound visual loss from trauma and infection.

- **Reduced corneal sensation can be a presenting feature of diabetic neuropathy.** This woman had no other symptoms or signs of neuropathy apart from her corneal anaesthesia. If a diabetic develops a red or irritable eye, corneal sensation should be tested.

- **There is some promise for the future in that neurotrophic corneal ulceration may potentially be treated by the use of topical neurotrophic growth factors.** The research into this project continues and is currently not in clinical practice.

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**Bilateral acute retinal necrosis and herpes simplex type 2 encephalitis in a neonate**

**Editor,—**Acute retinal necrosis (ARN) is a rapidly progressing, sometimes devastating, retinitis associated with the herpes virus family. First described in 1971, it is diagnosed by the clinical triad of progressive peripheral retinal necrosis, occlusive vasculopathy, and vitreous inflammation. The association of herpetic encephalitis with ARN has been described in adults. Herpes simplex virus type 2 (HSV-2) has also been recognised as one of the causative agents of the ARN syndrome, particularly in Japan. It has been suggested that ARN in patients less than 25 years of age is likely to be caused by HSV-2. We present a case of bilateral ARN (BARN) in a neonate with HSV-2 encephalitis.

**CASE REPORT**

A 25 day old infant presented with a 4 day history of lethargy, poor feeding, and coughing. Examination revealed an injected, blistered pharynx and a solitary red skin lesion on the left upper arm accompanied by a cluster of blisters. A clinical diagnosis of possible viral encephalitis was made, and intravenous aciclovir was commenced which has been shown to be negative for HSV-2. A sample obtained 2 months post partum was positive for HSV-2.

**COMMENT**

Neonatal HSV infection is usually sym ptomatic and has a high morbidity. Three quarters of cases are due to HSV-2, and this is most commonly acquired from the maternal genital tract lesion during delivery. The maternal HSV titres in this case suggest that the mother acquired a primary infection during the third trimester. A diagnosis of encephalitis was confirmed by the CT scan appearance and a PCR positive for HSV-2 in the CSF. The retinitis was first observed only 6 days after the onset of the systemic symptoms and progressed significantly despite intravenous administration of aciclovir. This treatment was continued for several weeks and was then followed by oral therapy. The fact that HSV was not identified from the vitreous or retinal biopsy may be attributable to the prolonged antiviral treatment.

HSV encephalitis is a severe infection, especially in the neonate, that carries a potential risk of significant oculovascular involvement. This case highlights the importance of early diagnosis and active management. Like ARN in adults, this may include the need for prophylactic laser retinal photoacogulation to prevent retinal detachment and, should this fail, pars plana vitrectomy with silicone oil tamponade.
Surgical excision, autolimbal transplantation, and mitomycin C in the treatment of conjunctival and corneal intraepithelial neoplasia

EDITOR—Conjunctival and corneal intraepithelial neoplasia (CIN) are uncommon lesions of low malignant potential.1 Surgical excision is the standard treatment for this condition. However, owing to the poorly defined borders of these lesions, recurrence rates following surgical excision can be as high as 53%.2 Adjunctive therapy including cryotherapy,3 radiotherapy,4 immunotherapy,5 and topical alcohol and urea have been used to treat the condition. Many of these procedures induce limbal stem cell failure with consequent corneal epithelial problems, requiring (auto) stem cell transplantation. Topical cytotoxic agents like 5-fluorouracil and mitomycin C have been used successfully in the treatment of CIN.6 However, inhibition of limbal stem cell division with mitomycin C is thought to notably impair physiological corneal epithelial replacement.7 We report the successful use of prolonged mitomycin C after autolimbal transplantation in the treatment of recurrent CIN.

CASE REPORT
A 37 year old white woman presented in February 1995 with a 6 month history of a fleshy white lesion in the corner of her right eye. In the past she had experienced intermittent episodes of bilateral sore, red eyes. Her visual acuities were 6/18 with pinhole in the right eye and 6/5 in the left eye. Ocular examination revealed a whitish elevated lesion on the right limbal conjunctiva from 7 to 11 o’clock extending almost to the central cornea (Fig 1A).

The patient underwent excision biopsy of the lesion. Intraoperatively the exposed bed of the lesion was treated with absolute alcohol and the conjunctival edge with two cycles of cryotherapy. Postoperatively, a bandage contact lens was inserted and she was treated with topical preservative-free antibiotics and steroids. One month later the corneal and conjunctival epithelium had healed completely and vision improved to 6/12. Histology confirmed the lesion to be conjunctival and corneal intraepithelial neoplasia (Fig 1B).

Two months postoperatively, she developed a recurrence in the form of two central, abnormal areas of corneal epithelium. These were treated by scraping and application of absolute alcohol to the bed of the lesion. Histology identified these lesions to be severely dysplastic corneal epithelial cells. Subsequently she developed right limbal stem cell failure resulting in recurrent episodes of filamentary and punctate keratitis and a reduction of visual acuity to 6/18. Histology of corneal scrapes showed epithelial cells and goblet cells. In February 1998 she underwent a right autologous limbal transplant and vision improved to 6/9.

Two months later she had a recurrence of CIN involving one third of the cornea (Fig 1C). This was treated with four cycles of 0.04% mitomycin C applied four times a day, for 10 days at a time. The tumour regressed completely in 3 months. Twenty months later she remains asymptomatic with a clear cornea (Fig 1D).

COMMENT
Mitomycin C is a cytotoxic alkylating agent which inhibits DNA synthesis and is, therefore, most effective against rapidly dividing cells. While it has been used to treat recurrences of CIN, there have been concerns about the effects of mitomycin C on the limbal stem cells and the integrity of the corneal epithelium.1 In our patient the grafted limbal stem cells and corneal epithelium remained healthy in spite of the significant dose of mitomycin C required to treat her recurrent CIN. To the best of our knowledge this is the first reported case of topical mitomycin C used successfully against CIN after autolimbal transplant, despite the prolonged duration of application (40 days).

The authors would like to thank Miss April Powell-Richards and Professor J Lowe for their help with the illustrations.

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Bilateral granulomatous uveitis in association with common variable immunodeficiency

EDITOR—We report a case of bilateral granulomatous uveitis, which prompted extensive diagnostic review in a 20 year old woman with a long history of recurrent infection and idiopathic thrombocytopenia. Investigations allowed the definitive diagnosis of common variable immunodeficiency with granulomas (granulomatous antibody deficiency syndrome.) To our knowledge this is the first reported case of granulomatous uveitis in
association with granulomatous antibody deficiency (GAD). We discuss the features of GAD, and how it may be distinguished from sarcoidosis.

CASE REPORT
A 20 year old woman presented with sudden onset blurred vision. Examination revealed a bilateral granulomatous uveitis with mutton-fat keratic precipitates and anterior chamber cells. Two weeks later she developed bilateral optic disc swelling with multifocal areas of choroidal pallor in her left eye (Fig 1). There was no vitritis or evidence of retinal vascular changes. Her uveitis settled on topical steroids and she maintained vision of 6/6 in the right eye and 6/9 in the left. The working diagnosis was sarcoidosis.

However, serum angiotensin converting enzyme (ACE) was not elevated and magnetic resonance imaging (MRI) showed no evidence of neurosarcoid. Plain chest films and high resolution computed tomography of the thorax revealed bilateral hilar and paratracheal lymphadenopathy, with air space shadowing and ill defined nodular opacities in both lower zones. Bronchial biopsies, obtained at fibre-optic bronchoscopy, showed inflammation of the bronchial epithelium consistent with bronchial pneumonia. No granulomata were seen.

As a child she had suffered from recurrent chest infections, with severe neutropenia and thrombocytopenia. By 6 years of age she had developed splenomegaly and widespread lymph node enlargement. Kveim and Mantoux test were both negative. Investigations for lymphoma over several years were negative. At 13 she underwent splenectomy for idiopathic thrombocytopenia. No definitive diagnosis was established for her in childhood.

She suffered an episode of parotitis and then, at 18, infective discitis of the lumbar spine requiring intravenous antibiotics. This precipitated a drug induced hepatitis with thrombocytopenia. Kveim and Mantoux test was positive. The diagnosis of GAD hinges on the presence of hypogammaglobulinaemia, while in sarcoidosis immunoglobulin levels are normal or raised.

Granulomatous uveitis is often an indicator of systemic disease. When there is a history of recurrent infection or of autoimmune disease, immunoglobulin levels should be measured to exclude the possibility of a treatable immunodeficiency.

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A postoperative complication far worse than endophthalmitis: the coexistence of orbital cellulitis

EDITOR,—The coexistence of endophthalmitis and orbital cellulitis in one individual is often a result of endogenous complications, such as metastatic sepsicaemia or infiltration from a neighbouring orbital infection. However, the coexistence of both these diseases as complications following intraocular or extraocular surgery is very rarely recognised and has only been reported previously in two patients who underwent radia keratotomy and penetrating keratoplasty. We report a patient who underwent uncomplicated phacoemulsification surgery under sub-Tenon anaesthesia and presented with an acute endophthalmitis and orbital cellulitis, leading to phthisis bulbi despite a good response to prompt treatment.
phthisis bulbi with no perception of light 2
disease to the eye was still a possibility. Her
derogenous spread from her chronic respiratory
carative endophthalmitis and orbital cellulitis
cavity. One of two reported cases of postop-
as an access for the pathogen into the orbital
clear.
However, the precise mechanism leading to
subsequent access gained via an open wound.

COMMENT

tomography (CT) orbital scan had revealed
dacryocystitis were also excluded. Computed
Streptococcus pneumoniae

commenced and changed accordingly when

diagnosis of both coexisting diseases is far worse than

earthritis of the eye from the conjunc-
tiva. This is supported by the findings of peri-
oral soft tissue swelling on the CT scan. In
addition, the degree of orbital involvement
could simply reflect the virulence of the
particular organism. Antigens built within 2
months of the initial infection was also the
result of the reported case of post-radial kera-
totomy, even though the causative pathogen
differed from the present case. As the progno-
sis of both coexisting diseases is far worse than
endophthalmitis or orbital cellulitis alone,
early recognition and the initiation of aggres-
sive treatment are vital.

PECK-LIN LIP

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CASE REPORT

A 77 year old woman with high myopia and
left aphakia underwent uncomplicated elec-
duately phacoemulsification surgery of the right eye, and was noted to have coexisting orbital cellulitis.

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Medicine—Millennium Ultrasound

Course Series

A course entitled “Obstetrical and Gynecologi-
cal Ultrasound” will be held in New York City,
NY, on 24–26 August 2001. Further details:
Stacey Bessling, Public Relations Coordinator,
AIUM, 14750 Sweeney Lane, Suite 100,
Laurel, MD 20707-5906, USA (tel: 301-498-
4100; email: sbessling@aium.org).

NOTICES

National prevention of blindness
programmes and Vision 2020

The latest issue of Community Eye Health (36)
discusses national prevention of blindness
programmes. For further information please
contact Community Eye Health, International
Centre for Eye Health, Institute of Ophthal-
mology, 11–43 Bath Street, London
EGIV 9EL. (Tel: (+44) (0) 20-7608 6909/
6910 6923; fax: (+44) (0) 7250 3207; email:
norecourses@icicem.ucl.ac.uk. Annual subscription
£25. Free to workers in developing countries.

Second Sight

Second Sight, a UK based charity whose aims are
to eliminate the backlog of cataract blind
in India by the year 2020 and to establish
strong links between Indian and British
ophthalmologists, will be sending volunteer
surgeons to India early in 2001. Details can be
found at the charity’s website at www.second-
sight.org.uk or by contacting Dr Lucy Mathen
(email address lucymathen@yahoo.com).

European Association for the Study of
Diabetic Eye Complications (EASDEC)

The next meeting of the European Associ-
ation for the Study of Diabetic Eye Complica-
tions (EASDEC) will be held in Paris, France,
on 19–20 May 2001. Further details:
Colloquium, 12 Rue de la Croix Faubin,
75 557 Paris Cedex 11, France (tel: +33-1-44
64 15 15; fax: +33-1-44 64 15 10; email:
s.munder@colloquium.fr).

European International Program of Disease
and Imaging of the Fundus

The European International Program of Disease
and Imaging of the Fundus under the auspices of
the European Programme for the Study of Diabetic
Eye Complications (EASDEC) will be held 2–12 July
2001 at the Clinique Ophthalmologique
Universitaire, 40 avenue de Verdun,
94010 Créteil, France. Further details:
Beatrice Rousseau (tel: (33 1) 45 17 52 22;
fax: (33 1) 45 17 52 66).

14th World Congress of the International
Society for Laser Surgery and Medicine

The 14th World Congress of the International
Society for Laser Surgery and Medicine is to be
held on the 27–30 August 2001 at Sri
Ramachandra Medical College and University
Hospital, Chennai, India. The American
Society of Lasers in Medicine and Surgery has

www.bjophthalmol.com
indicated that it will designate the 14th World Congress of ISLSM as its society's co-sponsoring meeting. A pre-conference course and separate sessions in ophthalmology will be held as a part of this international meeting. Further details: Dr B Krishna Rau, President, 14th World Congress of the International Society for Laser Surgery and Medicine, Department of Surgery, D2 Ward, Sri Ramachandra Medical College and Research Institute, Porur, Chennai - 600 116, India (tel: 91-44-4765856, 4768027-28, 8527776, 8594804; fax: 91-44-8594578, 4767008; email: krishnar@giasm01.vsnl.net.in and website: www.medindia.net/islsm2001).

31st Cambridge Ophthalmological Symposium
The 31st Cambridge Ophthalmological Symposium will be held 3–5 September 2001 at St John’s College Cambridge. The subject is Retinal Detachment. Further details: COS Secretariat, Cambridge Conferences, The Lawn, 33 Church Street, Great Shelford, Cambridge CB2 5EL, UK (tel: 01223 847464; fax: 01223 847465; email: b.ashworth@easynet.co.uk).

1st Asia Pacific Forum on Quality Improvement in Health Care
The 1st Asia Pacific Forum on Quality Improvement in Health Care will be held from 19–21 September 2001 in Sydney, Australia. Presented by the BMJ Publishing Group (London, UK) and Institute for Healthcare Improvement (Boston, USA), with the support of the Commonwealth Department of Health and Aged Care (Australia), Safety and Quality Council (Australia), NSW Health (Australia) and Ministry of Health (New Zealand). Further details: quality@bma.org.uk; fax +44 (0) 7383 6869.

41st St Andrew’s Day Festival Symposium on Therapeutics
The 41st St Andrew’s Day Festival Symposium on Therapeutics will be held on 6–7 December 2001 at the Royal College of Physicians of Edinburgh. Further details: Ms Eileen Strawn, Symposium Co-ordinator (tel: 0131 225 7324; fax: 0131 220 4393; email: e.strawn@rcpe.ac.uk; website: www.rcpe.ac.uk).

4th International Conference on the Adjuvant Therapy of Malignant Melanoma
The 4th International Conference on the adjuvant therapy of malignant melanoma will be held at The Royal College of Physicians, London on 15–16 March 2002. Further details: Conference Secretariat, CCI Ltd, 2 Palmerston Court, Palmerston Way, London SW8 4AJ, UK (tel: + 44 (0) 20 7720 0600; fax: + 44 (0) 20 7720 7177; email: melanoma@confcomm.co.uk; website: www.confcomm.co.uk/Melanoma).

XXIXth International Congress of Ophthalmology
The XXIXth International Congress of Ophthalmology will be held on 21–25 April 2002 in Sydney, Australia. Further details: Congress Secretariat, C/- ICMS Australia Pty Ltd, GPO Box 2609, Sydney, NSW 2001, Australia (tel: +61 2 9241 1478; fax: +61 2 9251 3552; email: ophthalm@icmsaust.com.au; website: www.ophthalmology.aust.com).

International Society for Behçet’s Disease
The International Society for Behçet’s Disease was inaugurated at the 9th International Congress on Behçet’s Disease. Professor Shigeaki Ohno represents the ophthalmology division (Department of Ophthalmology and Visual Sciences, Hokkaido University Graduate School of Medicine, Sapporo, Japan; tel: +81-11-716-1161 (ext 5944); fax +81-11-736-0952; email: sohno@med.hokudai.ac.jp). The 10th International Congress on Behçet’s Disease will be held in Berlin 27–29 June 2002. Further details: Professor Ch Zouboulis (email: zoubbere@zedat.fu-berlin.de).