LETTERS TO THE EDITOR

Spontaneous congenital epithelial iris cysts

EDITOR.—We read with interest the article on spontaneous congenital epithelial iris cysts by Paridaens et al. The authors report on 11 patients with congenital epithelial iris cysts which have been treated by surgical excision, sector iridectomy, or marsupialisation of the cyst. A cyst recurrent after surgery was noted clinically in two patients and an enucleation had to be performed in two children. The authors recommend a complete removal of the cyst wall using an iridocyclectomy if the ciliary body is involved.

This recommendation is in need of some clarifying statement. Spontaneous and acquired epithelial iris cysts nearly always (90-6%) cover the posterior corneal surface, the trabecular meshwork, the chamber angle, and the face of the ciliary body as we demonstrated recently in a series of 32 consecutive patients with spontaneous and acquired epithelial iris cysts.1,2 The very delicate cyst wall which contains a meshwork of three layers of stratified squamous epithelium does not allow any direct manipulation. If a cyst is incompletely removed, as in patient No 10 of that article, there is a high risk of recurrence and conversion of a cyst into diffuse epithelialisation of the anterior chamber with resulting intractable secondary glaucoma and consequent loss of the eye. This was presumably the cause of enucleation in the two described cases in our series.

A complete excision of epithelial cysts can therefore only be achieved by simultaneous en bloc removal (block excision) of the cyst with adjacent iris, pars plicata of the ciliary body, and, in contrast to an iridocyclectomy, cornea, and sclera in full thickness. Using this technique, guiding structures for proliferating epithelial cells (cornea, sclera, trabecular meshwork, iris, and ciliary body) and an investing epithelial cone within corneoscleral scar tissue as well are eradicated, and a recurrence of the cyst renders impossible. In our small series of 32 patients who have been treated between 1980 and 1991 with block excision we have not yet seen any cyst recurrence nor was an enucleation necessary. The obtained tissue can immediately be examined histopathologically and a complete resection can be confirmed. A perforating limbal scar could be detected in 20% of our patients without previous history of trauma. This fact may imply that occult corneal trauma prenatal, at birth, or in early infancy could be the cause of some of the 'spontaneous' epithelial iris cysts, so that there might be some other causes for the presence of surface ectodermal epithelium in the iris stroma than developmental displacement.

In comparison to the relatively high rate of recurrences (3/11) and enucleations (2/11) in the present series, block excision seems to be at present the treatment of choice for spontaneous and acquired epithelial iris cysts with chamber angle involvement owing to the lack of recurrence and enucleations and the relatively good long term visual results.


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Reply

EDITOR.—We entirely agree with the comments of Naumann et al that iris stromal epithelial cysts should be completely removed, and that this may require an en bloc resection as the cyst wall is delicate and liable to rupture, and also to guarantee complete removal.

The removal of epithelial cysts we reported extends over 40 years, the first case being catalogued in 1952, and over several referring hospitals. Surgical mores have altered considerably over in this long period and greater understanding of the persistent nature of the epithelium and its residual inherent capacity to slide along tissue planes has led to the current practice of complete resection in this centre as well as in Erlangen. Their high incidence (20%) of recurrent limbal scarring is not something we are able to comment on in our series, which includes second opinion referred pathological specimens.

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‘Dead man’s finger’ keratoconjunctivitis

EDITOR.—We wish to report a form of keratoconjunctivitis produced by ocular contact with the secretions of the dead man’s finger, the phylloxanid Cnudtaria, called Alcyonium digitatum and commonly known as dead man’s finger. The coral is widespread in the inshore waters around the British coast and is named from its supposed similarity to a swollen hand drained of blood.1,2 It is well known to fishermen, especially those involved in ground trawling who frequently draw them up in trawl nets.

As the nets are pulled on board the coral is compressed and secretions from it are propelled into the air. This frequently makes contact with the fisherman’s eyes, and some we have questioned estimate this to occur three to four times a week at certain times of the year. Normally only a small volume enters and after some initial stinging, followed by mild discomfort and redness, the symptoms resolve. However, when larger quantities enter the eye there is a more intense reaction, bringing the fishermen to local eye casualty departments. We have been a number over the last year with a consistently similar clinical appearance. There is moderate conjunctival chemosis with a mainly inferior follicular tarsal reaction with punctate trabecular and tarsal conjunctival haemorrhages. There is also a punctate intrapethelial keratopathy, again predominantly affecting the inferior cornea.

We have treated patients with initial irritation to remove any remaining noxious products and then with local steroids and antibiotics in an attempt to lessen the intense inflammatory response and to prevent superadded bacterial infection. All patients have made a complete recovery over a variable period of time between 2 to 14 days depending on the intensity of the initial reaction.

Alcyonium digitatum, as common to all Cnidaria including jellyfish, possesses specialised cells called cnidocytes which serve in both a defensive and a predatory role. It contains various organelles including nematocytes, which, when released from the cnidocytes, forcibly erect causing the formation of a thread-like structure with side "barbs". These can only adhere to and penetrate cell walls, but can also serve to release various toxins.3,4 These structures no doubt explain the typical intense focal reaction of the bulbar conjunctiva and cornea which we have encountered. Fishermen have noted that the secretions have a more noxious effect in the beginning of the year around March, which can possibly be explained by the build up of nematocytes during winter when food is scarce.

Secretions from various other organisms have been reported previously, causing local ocular reactions.5,6 We report this as a common problem which is likely to be seen at any casualty department near a sea port.

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NOTICES

Office of Continuing Education

A conference for the otolaryngologist, neurosurgeon, and radiologist, entitled 'Interactive surgery and imaging of parasinal sinuses, skull base, brain, and spine,' will be held on April 17-19, 1993 at the Silvertree Hotel, Snowmass Village, Colorado. Further details: Program Coordinator, Johns Hopkins Medical Institutions, Office of Continuing Education, Turner Building, 720 Rutland Avenue, Baltimore, MD 21205, USA. (Tel: (410) 955-2959).

European Study Group on Diabetic Eye Complications

The next meeting of EASEDC held jointly with the Epidemiology Study Group, will be in Cambridge, England, on 4-6 April 1993. The main topic is Epidemiology of Diabetic Retinopathy. Further details: Dr B Cathelain, Unité d’Ophthalmologie Diabetologique, Hôtel Saint Louis, 1 rue de Claude Vellefaux, 75475 Paris Cedex, France (Fax: (33) 42 49 41 78); or Professor M Boddi, Clinic for Diabetic Retinopathy, Royal Postgraduate Medical School, Du Cane Road, London W12 0NN, UK. (Fax: +44 81 740 3265.)