SHORT REPORT

Epidemic keratoconjunctivitis in Liverpool

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Case reports

DURING the latter part of 1982 there was a dramatic increase in the number of patients with acute keratoconjunctivitis presenting to the casualty department of St Paul’s Eye Hospital, Liverpool. In addition, patients who had attended with other eye problems were returning about 10 days later with acute keratoconjunctivitis; by early January 1983, re-attenders accounted for almost 50 per cent of cases seen in one week (Figure 1).

The conjunctivitis was mainly follicular, with preauricular adenitis (Bael’s syndrome). Scrapings taken from a random selection of such cases showed adenovirus 8 to be the causative organism, although serotypes 7 and 11 were also found.

The predominant symptoms were sensation of a foreign body, photophobia, lacrimation, discharge, swelling and inflammation, with hyperaemia of the bulbar conjunctiva, chemosis and haemorrhages on examination. A history of minor injury preceding the onset of symptoms was elicited from many of the patients. In severe cases, a pseudomembrane and a subepithelial punctate keratitis were present. Palliative treatment of this condition is all that can be offered at present, since there is no specific antiviral agent for adenovirus.1

Because the increase in the number of cases of keratoconjunctivitis was mainly due to the return of patients who had contracted the infection through attending the casualty department some 10 days beforehand (varying from 3-18 days), the normal technique of wiping tonometer heads with a solution of phenyl mercuric acetate (1 g in 3.2 litres of water) after each patient was considered inadequate. Accordingly, better hygiene and sterilization techniques were employed: the doctors washed their hands after examination of each eye; tonometer heads were soaked for 15 minutes in a solution containing 0.028 per cent available chlorine (‘Baby Safe’, Kirby-Warrick Pharmaceuticals Ltd); and between each consultation the slit lamps were washed down with Alco Wipe (Schering-Prebble Ltd).

Patients whose problem was diagnosed as epidemic keratoconjunctivitis were given a letter to take to their general practitioner. This stated the symptoms and signs of epidemic keratoconjunctivitis and the fact that there is no specific treatment for this condition; in addition, attendance at the hospital by patients with other than serious symptoms was discouraged.

With these measures, the number of patients presenting to the casualty department decreased, while the number of patients returning with acute keratoconjunctivitis fell to zero (Figure 1). It should be noted that at no time was the casualty department closed and that all patients who presented themselves were seen.

Comment

It is difficult for a general practitioner who is confronted by a patient with dramatic symptoms and signs of eye trouble to withhold treatment and not refer him or her to the casualty department of the local eye hospital. Nevertheless, our experience from this epidemic and the experience of other observers2 vindicate these measures. The non-referral of patients with infective conditions can, in certain circumstances,
contain the situation and avoid dissemination of the causative organism. Co-operation, understanding and, most important of all, communication between hospital and general practice is paramount, as in this situation—in which an epidemic was readily contained and reduced to acceptable levels.

![Graph showing total number of patients attending with acute keratoconjunctivitis](image)

**Figure 1.** Graph showing total number of patients attending with acute keratoconjunctivitis each week (○—○) and number of patients reattending with acute keratoconjunctivitis having attended St Paul's Eye Hospital for other complaints (●—●).

**References**


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**Figure 1.** Graph showing total number of patients attending with acute keratoconjunctivitis each week (○—○) and number of patients reattending with acute keratoconjunctivitis having attended St Paul's Eye Hospital for other complaints (●—●).