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OPHTHALMIC INFECTIONS

Guidelines for the management of Acanthamoeba Keratitis

Acanthamoeba keratitis occurs predominantly in patients who are contact lens wearers.

1. Clinical Features

It usually presents with a unilateral red eye. Pain is a common feature, which may be disproportionate to the clinical signs. Features typical of acanthamoeba keratitis are epithelial pseudodendrites, subepithelial or elevated infiltrates, as well as a 'classic ring' pattern of stromal infiltration, which is seen as the keratitis progresses. Radial linear infiltrates indicate nerve involvement and are also typical of the condition.

2. Diagnosis

- Early diagnosis requires a high index of suspicion. Acanthamoeba keratitis must be suspected in contact lens wearers with dendritic keratitis or atypical keratitis.
- Send corneal scrapes, contact lenses, lens solutions and lens cases for staining and culture.
- The corneal scrapes (including epithelium) should be sent to microbiology on all plates including Acanthamoeba agar plate (E. coli enriched non-nutrient agar) (plates available in corneal scrape kit). These are not urgent specimens and should only be done during the working day.
- In addition consider sending corneal epithelial specimen for polymerase chain reaction (PCR).

Before treatment all cases of acanthamoeba keratitis should be referred to one of the anterior segment consultants.

Products available for the treatment of acanthamoeba keratitis are:

- G.chlorhexidine 0.02%
- G. propamidine isetionate 0.1%
- G. polyhexamethylene biguanide 0.02% (Non-Formulary, requires DTC approval)