Sandwell and West Birmingham Hospitals NHS
NHS Trust

# OPHTHALMIC INFECTIONS
# GUIDELINES FOR THE MANAGEMENT OF ACANTHAMOEBA KERATITIS

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| **Policy authors** | Conor Jamieson; Nimal Wickramasinghe |
| **Accountable Executive Lead** | Clinical Director |
| **Approving body** | BMEC Directorate Governance Group<br>Drugs and Therapeutic Committee |
| **Policy reference** | SWBH/BMEC/Ophth/07 |

**Overall purpose of the guideline**

To provide guidelines for the management of Acanthamoeba Keratitis

**Principle target audience**

All patients.

**Application**

The guideline applies to all patients presenting with ophthalmic infection of acanthamoeba keratitis.

**Scope**

The guideline applies to all patients

**National Guidance incorporated**

n/a

## *DOCUMENT CONTROL AND HISTORY*

| Version No | Date Approved | Date of implementation | Next Review Date | Reason for change (e.g. full rewrite, amendment to reflect new legislation, updated flowchart, etc.) |
|---|---|---|---|---|
| 1 | March 2012 | March 2012 | March 2014 | Minor changes |
| 2 | July 2013 | July 2013 | December 2016 | |
| 3 | May 2017 | May 2017 | May 2019 | Routine review |

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 (*Escherichia 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%