Reviewer’s report

Title: Clinical And Microbiological Profile Of Infectious Keratitis In Children

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Reviewer: Fiona Stapleton

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This manuscript reports an interesting and important topic. Microbial keratitis in childhood may have important implications for visual development. The authors report a retrospective records audit.

General comments

1. The manuscript needs a description of the microbiology methods, treatment protocols, what were the criteria for a positive culture. 34% might be a low culture proven rate or as expected based on the methods.

2. Reporting of significant figures age & days to presentation don’t need reporting to 2 decimal places.

3. There is a strange selection of the denominator in several of the rates presented. The rates for different organisms for example would generally be expressed as a proportion of the positive cultures rather than a fraction of the total sampled. This might make it easier to compare with other literature. Similarly for the frequency of different risk factors.

4. In tables 1 and 2 the numbers of trauma cases don’t match 8 in table 1 and 7 in table 2. Table 2 could probably be incorporated into the text.

5. There is inconsistency in the reporting of results in the text on page 5 and table 3. For example the description of the gram positive isolates is confusing table shows 10 and text shows 9. The text describes 2 gram negative bacilli as P.aeruginosa but the table describes 2 P.aeruginosa and 2 further gram negative bacilli. I would suggest referring to the table only and avoiding duplication or inconsistency. What were the additional gram negative bacteria, these need reporting to the species level.

6. Page 5 re antibiotic sensitivity testing, should this read Staphylococcus spp. Not sp. or are the authors referring to either S.aureus or S.epidermidis. Please clarify.

7. Could table 3 also incorporate the risk factors associated with the organism recovery.

8. There is mention of prior antibiotic treatment in a proportion of cases, but the care pathway is not discussed. This would seem important in reducing the morbidity associated with the disease. Also it is not clear from the methods which
of the possible reasons for a low culture proven rate would be likely in this study, for example how were samples taken.

9. Page 6, hypoxia in adult contact lens wearers is unproven as a risk factor for microbial keratitis.

10. Were the contact lens wearers using lenses for orthokeratology?

11. It is difficult to conclude changes in sensitivity over time with so few culture proven cases.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

None