Infectious keratitis after pterygium surgery

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Purpose

 In this study, we described eleven cases of infectious keratitis following pterygium surgery. The authors are unaware of any other studies detailing keratitis after pterygium surgery.

Methods

• In this retrospective study, the medical records of eleven patients who presented with infectious keratitis following pterygium surgery from January 2016 up to December 2017 were reviewed. The patient data recorded at other hospitals were collected by reviewing hospital records. The data of the patients who underwent surgery at Farabi Eye Hospital and were followed using the routine schedule were extracted from hospital records and the patients were advised about any untoward post-operative events. Cases with apparent infiltration in the cornea were included, but patients with corneal thinning without infiltration such as dellen formation were excluded from the study.

Results

• Eight patients were men. The mean age of the patients was 63.6 ± 8.2 (53–77) years. The mean latency period between pterygium surgery and corneal ulcer was 49.3 ± 41.2 (25–165) days. Five cases developed keratitis as a result of surgery at Farabi Eye Hospital out of a total of 2118 pterygium operations during the same time period, suggesting an incidence rate of two corneal ulcers in every 1000 pterygium operations. However, it is possible that some patients with keratitis following pterygium surgery at Farabi Eye Hospital were visited elsewhere. In this retrospective study, the medical records of eleven patients who presented with infectious keratitis following pterygium surgery from January 2016 up to December 2017 were reviewed.

Conclusion

• In conclusion, keratitis could unexpectedly occur more than one month after pterygium surgery; therefore, close follow-up of susceptible patients for a more extended time is warranted. Grampositive organisms were most frequently isolated. This finding could emphasize the possible role of ocular surface flora superinfection, especially with gram-positive bacteria, in the context of segmental scleral ischemia following the use of topical steroid in the presence of persistent epithelial defects. This study found an incidence of 2/1000 for microbial keratitis after pterygium surgery. A prospective study would be required to substantiate our findings.