A retrospective 4-year review of paediatric corneal ulcer cases in Hospital Tunku Azizah

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ABSTRACT

Introduction: Corneal ulcer causes global blindness and leads to amblyopia in children if left untreated. Materials and Methods: A retrospective cross-sectional study was conducted at Hospital Tunku Azizah, consisting of paediatric corneal ulcers under 12 years old between January 2020 to May 2024. Data were extracted from medical records using the ICD-10 (International Classification of Diseases, 10th Revision) coding system. A total of 35 paediatric corneal ulcers were reviewed. Results: The mean age was 4.6 years, with 24 males (68.5%) and 11 females (31.4%). The mean duration between symptom onset and first presentation was 9.3 days. Risk factors were divided into infective (31.4%) and non-infective causes (68.6%). Non-infective causes included exposure keratitis and neurotrophic (41.7%), followed by immune-mediated (vernal keratoconjunctivitis, allergic conjunctivitis) (29.2%), post-trauma (25%), and ocular surface disease (4.1%). The mean visual acuity on presentation was 6/30. The mean visual acuity post treatment was 6/18. Four (11.4%) cases yielded positive culture. All patients were started empirically with a loading dose of topical antibiotic still cultures were reviewed. Unfortunately, one worsened requiring allogeneic plasma eye drops, multiple amniotic membrane transplantation and tarsorrhaphy for non-healing corneal defect and another one patient had recurrent ulcer due to non-compliance to medication. Conclusion: Corneal ulcer is preventable and treatable, resulting in good visual outcome. Hence, early detection is essential for timely treatment to reduce complications.