

Resistant *Pseudomonas aeruginosa* Keratitis in a Contact Lens Wearer: A Case Report

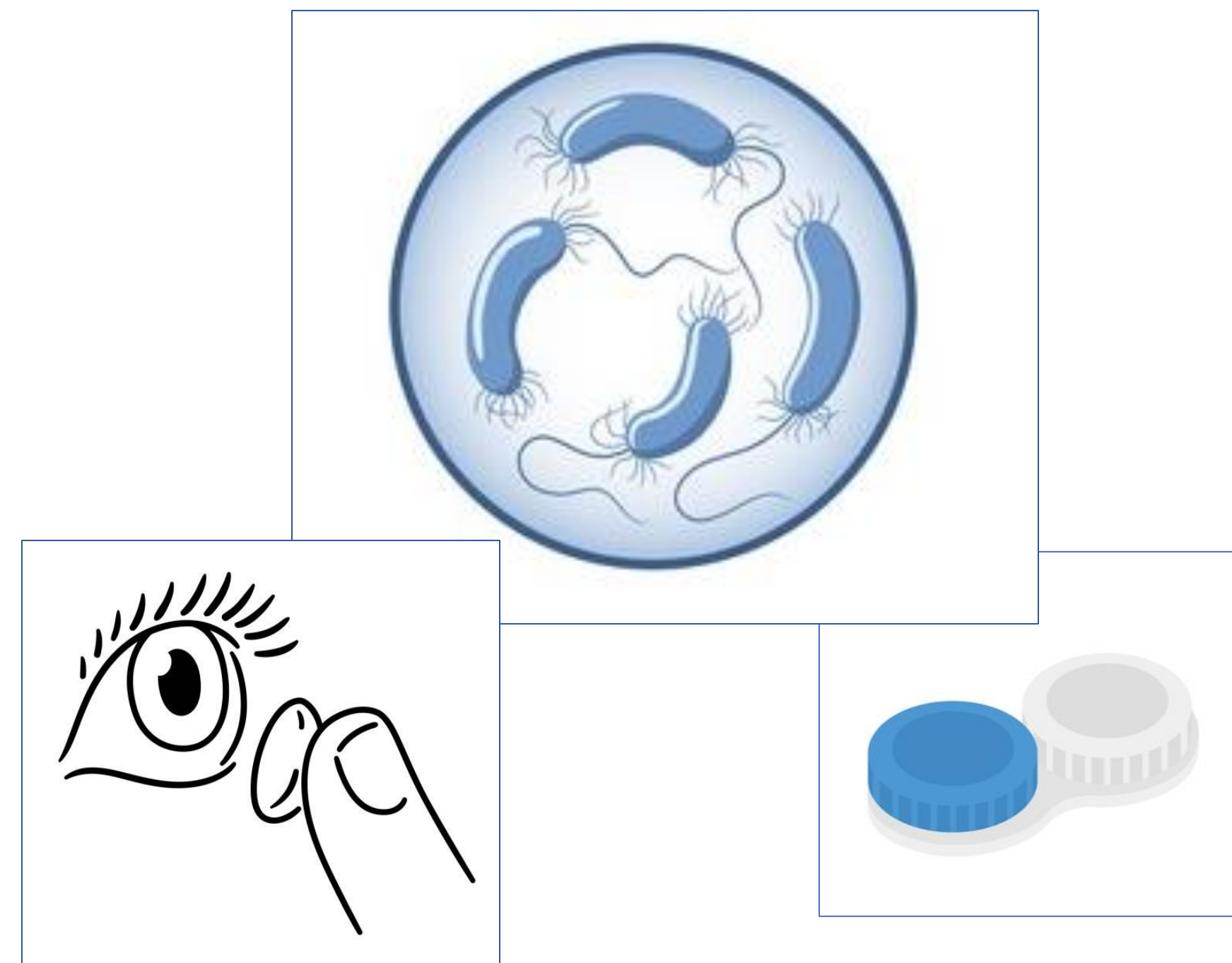


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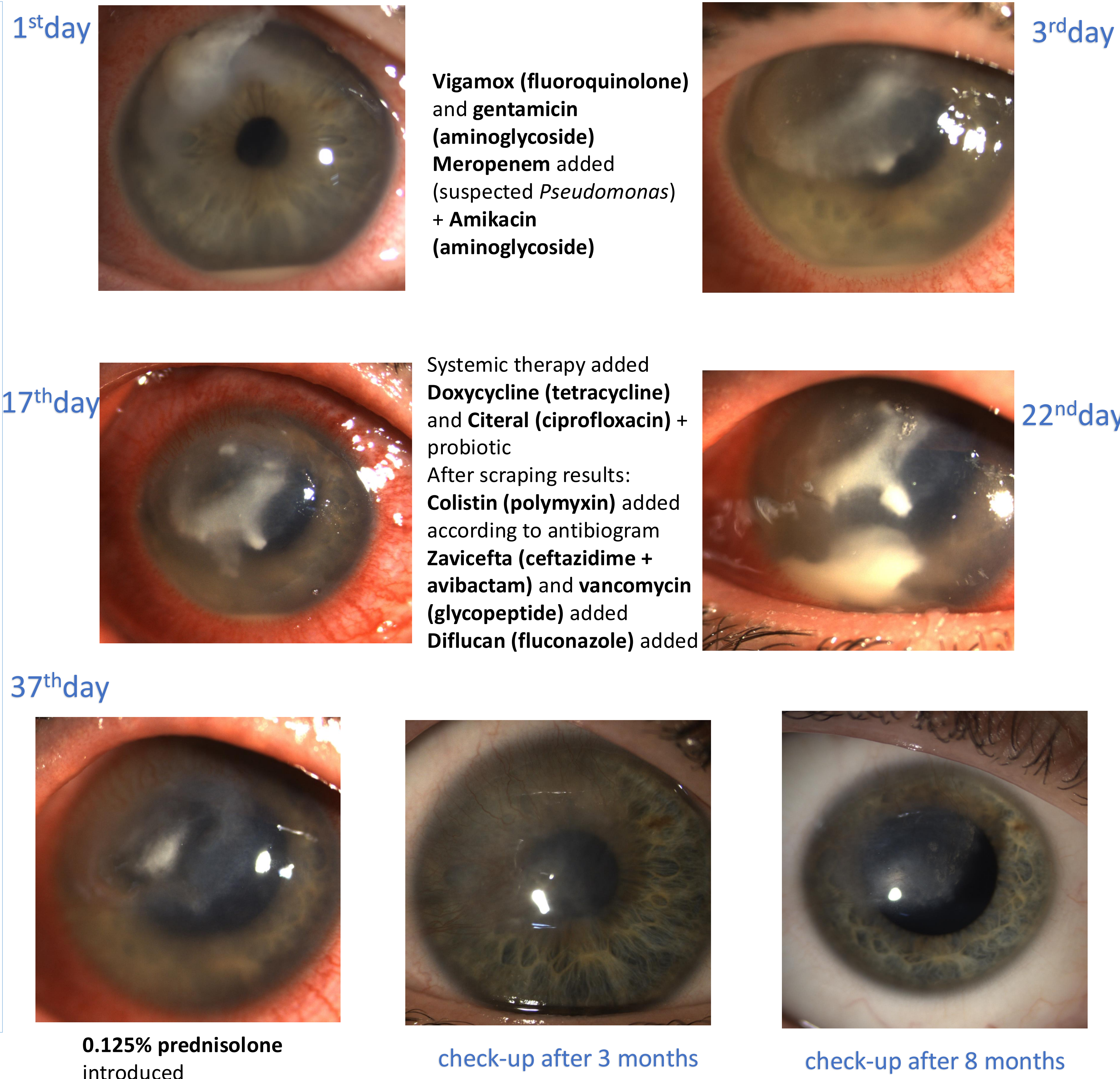
Objective: To present a case of keratitis caused by a multidrug-resistant strain of *Pseudomonas aeruginosa* in a contact lens wearer.



Introduction: Keratitis is one of the most serious complications associated with contact lens use. Risk factors include prolonged lens wear, poor hygiene, exposure to water, sleeping with contact lenses, and unsupervised use of topical corticosteroids, which may worsen infection and delay appropriate treatment.

Methods: This is a case report of a 21-year-old female contact lens wearer who presented with acute keratitis. Clinical examination, corneal scraping, and microbiological analysis were performed. The patient was treated with intensive topical and systemic antimicrobial therapy, adjusted according to clinical response and microbiological results.

Results: The patient presented with eyelid edema, conjunctival hyperemia, and severe pain in the right eye. BCVA in the affected eye was 0.1 at presentation. Microbiological analysis revealed a resistant strain of *Pseudomonas aeruginosa*. Despite initial empirical therapy, clinical deterioration occurred, requiring multiple modifications of antimicrobial treatment. After several weeks of intensive topical and systemic antimicrobial therapy, topical corticosteroid treatment was initiated. The patient was hospitalized for seven weeks and discharged with improved visual acuity of 0.3, with continued scheduled follow-up visits.



Conclusion: Keratitis caused by multidrug-resistant *Pseudomonas aeruginosa* represents a major therapeutic challenge in contact lens wearers and may result in significant visual impairment. Strict adherence to contact lens hygiene and avoidance of unsupervised corticosteroid use are essential for prevention.

