CONTACT LENS-RELATED PSEUDOMONAS AERUGINOSA KERATITIS: A CASE REPORT

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Purpose:

This case report aims to highlight the individual risk and societal implications of contact lens-related microbial keratitis.

Methods:

A 37YO female presented with complaints of pain, excessive tearing, and photophobia in her right eye after cosmetic-plano contact lens use. She had purchased the lenses a week before the onset of symptoms and had used them three times, each time for five hours, with lens removal at night. On the third use, she experienced the above symptoms three hours after wearing the lenses and promptly removed them. However, she sought medical attention 24 hours later. The patient denied any underlying medical conditions and had adhered to recommended contact lens hygiene practices. Upon examination, her visual acuity was limited to counting fingers at a distance of four meters. Slit lamp examination revealed significant conjunctival injection (2+), a 4x4 millimeter epithelial defect, subepithelial ring infiltration, and 4+ cells in the anterior chamber. Within eight hours of admission, necrotic stromal infiltration, corneal melting, and edema resulting in corneal thinning were observed.



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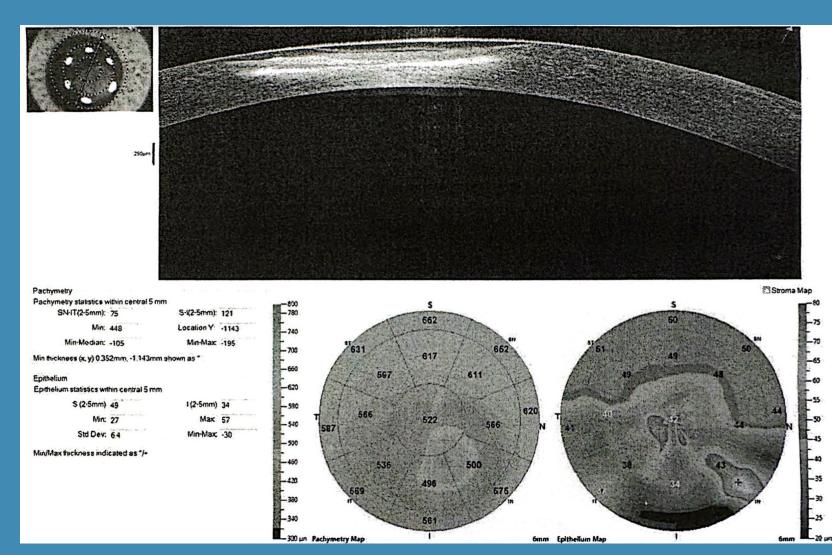
Results:

The corneal ulcer scrape was performed, and the specimen was sent for smear and culture. Gram-negative bacilli were identified in the smear, while the culture remained negative. Pseudomonas aeruginosa is the predominant pathogen responsible for contact lens-induced keratitis and corneal ulcers.

Conclusions:

Pseudomonas keratitis displays a rapidly progressive course. Timely diagnosis and appropriate antibiotic treatment are imperative to prevent vision loss and severe visual impairment. Patients using cosmetic contact lenses face a higher risk due to limited education and infrequent follow-up visits.

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