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Bilateral Acanthamoeba keratitis After Orthokeratology.

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PURPOSE: To report bilateral Acanthamoeba keratitis after wearing an overnight reverse geometry contact lens for 5 days.

METHODS: Case report and review of the medical literature.

RESULTS: A 22-year-old woman developed bilateral corneal ulcers during orthokeratology. A slit-lamp examination revealed round epithelial abrasion, radial infiltration, and disciform keratitis in both corneas. Visual acuity in her right eye (OD) was hand motion and left eye (OS) was counting fingers. Bilateral Acanthamoeba keratitis was diagnosed by culture using nonnutrient agar overlaid with viable Escherichia coli. Small, round, and double-walled cysts were observed in nonnutrient agar under an inverted phase contrast microscope. Topical 0.02% polyhexamethylene biguanide, Cravit (0.5% levofloxacin), and Tobra (0.5% tobramycin) were administered. After 1 month of treatment, the corneal ulcers had healed and the patient's best-corrected visual acuity was 20/100 OD and 20/25 OS.

CONCLUSIONS: Acanthamoeba keratitis can simultaneously affect both eyes during overnight orthokeratology.

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