

**SERRATIA MARCESCENS CORNEAL ULCER-COMPLICATIONS
OF ORTHOKERATOLOGY
A CASE REPORT**

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Orthokeratology is the technique of using rigid contact lenses to cause progressive flattening of the cornea to induce reduction in myopia and astigmatism. It is hoped that, ultimately, lens wearing time can be reduced to the minimum required to attain good functional vision throughout the day. However, orthokeratology suffers from lack of predictability and poses patients at great risk of infection.

A 9-year old boy was under orthokeratology protocol for 6 months in USA. He was wearing hard contact lens overnight on daily basis. Painful right eye was noted when he came back to Taiwan for his summer vacation. His visual acuity was HM/10cm, OD and 6/12, OS on his first visit to our hospital. The conjunctiva of his right eye was severely congested and corneal edema with abscess on the center was noted. Corneal debridement, conjunctival swab, corneal scraping and cultures were performed. Contact lens storing solution was also sent for culture. Ciloxan, q1h OD day and night, 1% atropine tid OD were given. Culture of contact lens storing solution revealed *Serratia marcescens* which was sensitive to Ciloxan. Central scarring of cornea was noted. He was then returned to USA under stable condition. Patients who receive orthokeratology therapy must be followed carefully and instructed to contact their ophthalmologists whenever problems occur.

Key words: Orthokeratology, *Serratia marcescens*, corneal ulcer, complications.

Received: February 24, 1999, Revised: June 30, 1999, Accepted: March 2, 2000.

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