

Ocular complications of primary varicella infection

Purpose: To determine the rates of ocular complications arising from primary varicella (chickenpox) infection. To describe chronic or severe cases of ocular involvement secondary to primary varicella infection.

Method: A retrospective case series study of 28 patients referred to the Greenlane Eye Clinic with ocular complications from primary varicella was undertaken. The study period was from March 2009 to March 2019. The patients were identified from clinical coding.

Results: 33 eyes of 28 subjects were included in the study. Median age at presentation was 6.1 years (IQR 3.8-15.7) and the median duration between onset of rash and development of ocular signs was 4 days (IQR 1-10). Presentation was unilateral in 22 subjects and bilateral in 5 (17.9%). The most common presentation was with conjunctivitis in 13 subjects (46.4%). Anterior uveitis was observed in 9 subjects (32.1%), disciform keratitis 2 subjects (7.1%), periorbital cellulitis 2 subjects (7.1%) and isolated lid involvement 2 subjects (7.1%). Two subjects had neurological sequelae; an 8 year old with uveitis and Adie's pupil and a 16-year old with optic neuritis. One subject developed uveitic glaucoma following primary varicella. Only two subjects had vision loss secondary to primary varicella ocular complications, both of these presented with disciform keratitis.

Conclusion: Ocular sequelae of primary varicella are rare. Subjects with primary varicella should not be routinely reviewed, but referred if they have visual symptoms or develop preseptal cellulitis secondary to infected pox. Disciform keratitis secondary to primary varicella carries a higher risk of visual impairment.