

Comparative features and assessment of types of infectious keratitis

	Bacterial keratitis	Herpes simplex keratitis	Herpes zoster ophthalmicus
Presentation	<p>painful eye</p> <p>red eye</p> <p>watery eye</p> <p>mucous discharge</p> <p>reduced or blurred vision</p> <p>photophobia</p> <p>white spot usually seen on cornea</p>	<p>painful eye</p> <p>red eye</p> <p>watery eye</p> <p>reduced or blurred vision</p> <p>photophobia</p> <p>itching</p> <p>epithelial keratitis (dendritic ulcer)</p> <p>geographical ulcer</p> <p>stromal keratitis (stromal opacity, stromal ulceration, scarring)</p> <p>endothelial keratitis (stromal oedema, keratic precipitates)</p>	<p>painful eye</p> <p>red eye</p> <p>watery eye</p> <p>reduced or blurred vision</p> <p>photophobia</p> <p>can also cause epithelial keratitis and stromal keratitis</p>
Risk factors	<p>contact lens wear</p> <p>eye trauma</p> <p>compromised ocular surface (eg following eye trauma)</p>	<p>previous HSV infection</p> <p>active cold sores</p>	<p>shingles (herpes zoster), especially if rash involves tip of the nose (Hutchinson's sign)</p>
Investigations	<p>prompt ophthalmology referral for consideration of a corneal scrape for culture and susceptibility testing</p> <p>for contact lens wearers, culture of swab samples from contact lenses and cases</p>	<p>prompt ophthalmology referral</p> <p>fluorescein staining of the cornea to facilitate diagnosis of epithelial keratitis [NB1]</p> <p>antigen detection or NAAT (eg PCR) of a conjunctival swab</p> <p>consider optometry services to aid in diagnosis if ophthalmology review is likely to be delayed</p>	<p>ophthalmology referral</p> <p>diagnosis is usually clinical</p> <p>if diagnosis uncertain, swab inflamed conjunctiva for NAAT (eg PCR)</p>

HSV = herpes simplex virus; NAAT = nucleic acid amplification testing; PCR = polymerase chain reaction

NB1: For a photo of fluorescein staining showing a dendritic ulcer caused by herpes simplex virus, see 'Assessment of infectious keratitis' in *Therapeutic Guidelines*.