INJURIES INVOL VING THE EYE AND ADJACENT STRUCTURE

INJURIES INVOL VING THE EYE AND ADJACENT STRUCTURES Corneal abrasions and ulceration

The cornea is frequently damaged by direct trauma or by foreign bodies (Figure 49.16). Ulceration can occur with infection, exposure (for example in severely ill patients with incomplete eye closure) or after damage to the facial nerve. Postherpetic ulceration is common and serious if not treated. Fluorescein instillation illuminated by blue light shows up corneal ulceration at an early stage, with areas of epithelial loss fluorescing green. Treatment of sterile corneal abrasions or exposure is by topical lubrication or padding of the eye. If bacterial infec tion is suspected, a swab or scrape may be performed for microbiological diagnosis and topical antibiotics such as 0.5% chloramphenicol or ofloxacin eye dr ops are commonly used. Jean Descemet , 1732–1810, French physician and botanist. The eye is made more comfortable by the use of mydriatics such as cyclopentolate to reduce photophobia. Herpes sim - plex dendritic ulcers are treated with aciclovir ointment. In countries in the Far and Middle East, chronic infection with trachoma can cause corneal opacification and blindness, although the worldwide incidence of this condition is falling. Corneal grafting is the only cure for an opaque cor nea. Until recently , full-thickness penetrating keratoplasty was the only corneal graft technique. For some conditions this has largely been replaced by lamellar or partial-thickness graft surgery , in a technique termed DSEK or ‘Descemet’s stripping endothe - lial keratoplasty’. However, penetrating keratoplasty remains the treatment of choice for severe corneal damage due to infection or injury . Rarely , osteo-odonto-keratoprosthesis can be attempted in very severe cases of opaque corneas that are not suitable for grafting. Artificial corneal prostheses have also been developed. Acanthamoeba is a rare serious cause of cor - neal infection. This infection usually follows the use of contact lenses. Specialist management and treatment is recommended. Summary box 49.3 Corneal abrasions /uni25CF /uni25CF /uni25CF

Figure 49.16 Corneal foreign body. A drop of /f_l uorescein dye illuminated by a blue light reveals even the smallest corneal abrasion Corneal ulcers are often more serious in contact lens wearers and require prompt assessment and treatment Development of white in /f_i ltrate in/around a corneal abrasion is a sign of infection

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