British Burn Association Initial Management of Ocular Burns Clinical Practice Guideline



Adults and children with ocular burns should be discussed with the local Ophthalmology and Burns Service

www.britishburnassociation.org

Prepare

- Administer appropriate topical anaesthetic eye drops to facilitate irrigation and examination^{1,2,3}
- Remove any exudate, particulate matter, debris and scabs from the eye⁴
- Remove contact lenses, if able⁴
- Check corneal pH (mean pH of tears is 7.6)⁵

First Aid

Do not delay immediate irrigation of the eye for detailed assessment of patient or acquiring a particular irrigation fluid, regardless of delay in presentation^{6,7,8}

- Commence urgent irrigation with a sterile isotonic solution (e.g. Hartmann's or Normal Saline), an amphoteric solution (Diphoterine®), or water.^{6,7,9,10,11,12,13}
- Irrigate for as long as practically safe and possible. Keep patient warm to prevent hypothermia (children and elderly are most susceptible).^{6,14}
- Keep unaffected eye uppermost to avoid cross contamination¹⁵
- Flush from the inside corner to the outside. Use a Morgan lens or the end of IV tubing to direct the sterile solution across the eye.^{9,16}
- Rinse the eye and the deep fornices thoroughly. If possible, evert the eyelids.^{9,15}
- In chemical injuries, repeat the pH test soon after the irrigation has ceased and again 30 minutes later9

Assess

- Re-apply topical anaesthetic if needed to allow for adequate assessment¹⁵
- Examine the lids and face for chemical or thermal burns⁶
- Exclude any ocular, intraocular, or intraorbital foreign body or chemical^{4,17}
- Fluorescein corneal staining^{17,18}
- Clouding of the cornea and perilimbal blanching
- Visual acuity examination (with ophthalmology input)
- Intraocular pressure (with ophthalmology input)

Treat

- Check Tetanus immunisation status¹⁶
- Trim singed or scorched eyelashes⁴
- Apply chloramphenical ointment to burnt eyelids and ocular surface to reduce the risk of infection^{16,17}
- Sit patient upright to reduce facial and eyelid oedema¹⁹
- Discuss with the local Ophthalmology and Burns Service

Adopted with permission from London and South East of England Burn Network. Developed for BBA in June 2018.

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