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 eye[4]
- Remove contact lenses, if able[4]
- 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 contamination[15]
- 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 later[9]

Assess

- Re-apply topical anaesthetic if needed to allow for adequate assessment[15]
- Examine the lids and face for chemical or thermal burns[6]
- 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 status[16]
- Trim singed or scorched eyelashes[4]
- Apply chloramphenicol ointment to burnt eyelids and ocular surface to reduce the risk of infection[16,17]
- Sit patient upright to reduce facial and eyelid oedema[19]
- 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. Review in June 2021

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