

Corneal and Conjunctival Burns

The degree of damage to **the cornea** and **conjunctiva** from acid or alkali etching depends on the exposure time and the concentration of the caustic.

- **the acids** cause **coagulation necrosis** , which prevents deep damage to the cornea
- **the principles** cause **colliquative necrosis** , which goes deep and causes more serious injury

The most common substances that cause burns

- - *lime*
 - *sulfuric acid*
 - *hydrochloric acid*

Injury Description

- - **minor injuries** cause necrosis of the corneal epithelium and occlusion of the perilimbal vessels, which prolongs or hinders healing
 - **severe injuries** cause necrosis of the cornea and sclera

Visible changes

- *pseudopterygium* – a fibrovascular membrane that grows over the clouded cornea
- *symblepharon* – adhesions between the lid and bulbar conjunctiva as a result of conjunctival scarring
- *ectropion* – scarring causes the edge of the lids to turn away from the bulb
- *trichiasis* – eyelashes turn against the bulb and thereby traumatize the conjunctiva and cornea
- *inflammatory uveal reaction*
- *secondary glaucoma*

Degrees of etching

- - **1st degree** : congestion of the eyelids, conjunctivae, mucous secretion, erosion of the eye surface (heals ad integrum)
 - **2nd degree** : previous signs, in addition blisters and the formation of ischemic foci (small corneal opacities remain, possibly symblepharon)
 - **3rd degree** : skin necrosis, ischemic changes, vessel occlusion, boiled fish eye - clouded cornea (prolonged healing, dry eye, corneal vascularization)
 - **4th degree** : charring (loss of the eye)

First Aid

- - remove the caustic with any suitable solution
 - mechanically clean the eyelids, cornea, conjunctivae
 - transfer to the eye clinic: prevent secondary infection - application of ATB, corticosteroids (used only in the first phase of healing)
 - treatment of eyelid position, symblepharon, pseudopterygia, trichiasis
 - in case of damage to the lacrimal apparatus and lack of tears, the application of artificial tears

Links

Related Articles

- Eye
- Eye examination. Distribution of basic faults by perimeter

References

- ROZSÍVAL, Pavel, et al. *Ophthalmology*. 1st edition. Prague: Galén, 2006. 373 pp. ISBN 80-7262-404-0 . (http://www-wikiskripta-eu.translate.goog/w/Speci%C3%A1ln%C3%AD:Zdroje_knih/80-7262-404-0?_x_tr_sl=cs&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=sc)
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