

# 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, symblephares, 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.google.com/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](http://www-wikiskripta-eu.translate.google.com/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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