

# Eye care in intensive care

Modified guidance for ventilated patients including patients in the prone position

## Risks

**!** All patients on ventilators have a risk of exposure of the cornea and developing corneal infection. This can occur irrespective of body position.

When ventilating patients in the prone position there should be good access to examine the eyes regularly (every four hours). The key is to reduce ocular surface dryness and keep the ocular surface lubricated. Corneal abrasions in most cases can be managed without ophthalmology review by following the protocol described below.

Referral to on-call Ophthalmology team should only occur after local medical review.

## Ocular examination

### Grade 0 Eyes totally closed



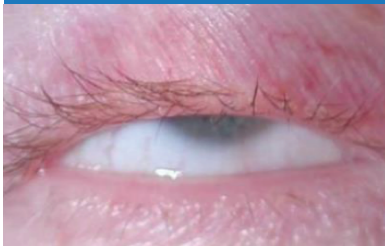
No action.

### Grade 1 Eyes slightly open



Use simple eye or Vit A POS or Xalin eye ointment every four hours.

### Grade 2 Cornea exposed

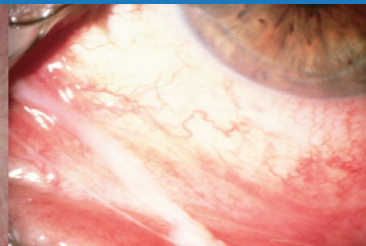


Apply micro pore tape horizontally and apply ointment as grade 1 every four hours.  
Check corneal clarity with bright light.

### Examples



Eye lid taping



Red and stick eye

## Fluorescein staining

If corneal abrasion is suspected instill sodium fluorescein (or use fluorescein strips wetted with sterile normal saline) into the eyes and illuminate with a blue light (use blue filter on pen torch or most ophthalmoscopes) and observe naked eye.

## Eye care in the ICU

**Grade 0** No action unless in prone position.

**Grade 1** Eyes need lubricating every four hours

- Clean off old ointment before putting in new
- Pull lower lid down and instil ointment onto eye between lower lid and conjunctiva
- Always check corneal clarity with bright light.

**Grade 2** Eyes need lubricating and lids taping

- Apply ointment as for Grade 1
- Close lids, ensure lashes outside eye and lids free of ointment
- Tape upper lid down with micropore tape horizontally
- Always check corneal clarity with bright light.

## Red eye

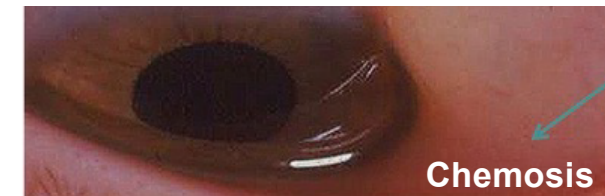
### Red and sticky - cornea clear

- Take swab
- Use chloramphenicol ointment four times a day (add ofloxacin eye drops four times a day if prone)
- Condition is contagious and can be transmitted to other patients
- **Alert** medical staff if no better in 24 hours.

### Red but not sticky

- Is the cornea clear or does it stain with fluorescein drops?
- If clear cornea or simple abrasion, check usage of chloramphenicol ointment. If abrasion present use ofloxacin eye drops four times a day. Consider lid taping.
- **Alert** medical staff if corneal opacity or eye not dry.

**!** If cornea is not clear - alert medical staff.



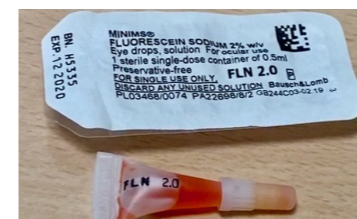
Chemosis

## Prone patient & unconscious

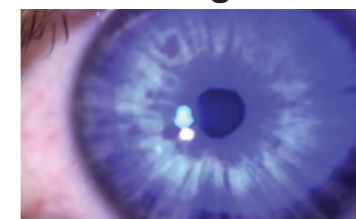
Major risk to eye in all cases

- Conjunctiva can get swollen (chemosis see above)
- Apply chloramphenicol eye ointment four times a day and instill as in Grade 1
- Close lids, ensure lashes outside eye and lids free of ointment micropore tape horizontally
- Always check corneal clarity with bright light.

### Fluorescein viral

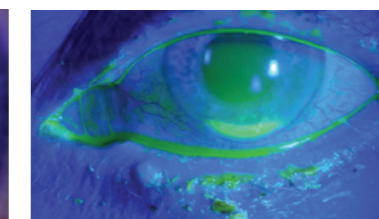


### No staining



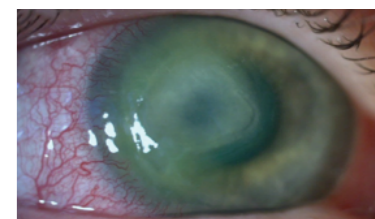
Cornea clear. Continue lubrication.

### Corneal abrasion



Risk of infection. Use ofloxacin eye drops four hourly and chloramphenicol eye ointment four times a day.

### Corneal infection



**Refer to Ophthalmologist** for further advice and management.