

# Eye Care in the Intensive Care Unit: A Brief Note

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## DESCRIPTION

Patients in intensive care units have a higher risk of developing contact keratopathy. If left untreated, it can lead to microbial keratitis and vision loss. The risk of corneal exposure and microbial keratitis is higher in ventilated, critically ill patients; however, there is evidence that eye care is a neglected field of patient care. Within one general intensive care unit, an audit of eye surface disease and eye care documentation revealed an issue (GICU). It also offers evidence-based advice on how to protect the eyes of elderly patients, recognise eye conditions in intensive care patients, and provide the best eye treatment [1]. The majority of corneal problems faced in the intensive care unit can be avoided by following a properly performed eye-care guideline, according to growing evidence. Since many of the processes that usually protect the eye from infection and damage are impaired in critically ill patients, eye care is an integral part of their care. The sclera, avascular cornea, and conjunctival epithelium make up the ocular surface. Ocular surface disease (OSD) can affect all of these structures and manifest itself in the following ways:

1. Direct injury to the cornea – most often a superficial corneal abrasion (scratch)
2. Exposure keratopathy
3. Chemosis (conjunctival swelling)
4. Microbial conjunctivitis and keratitis

OSD is widespread in intensive care unit (ICU) patients, affecting 23–60% of those who are admitted. ICU eye care procedures are often practised haphazardly, and documentation of eye care is frequently inadequate. The majority of corneal conditions can be avoided by following a straightforward evaluation and intervention plan that is followed rigorously and correctly. It focuses mainly on common eye surface issues, but it also covers certain less common disorders. As a result, it should be useful to ophthalmologists who are asked for advice on ICU patients [2]. The Joint Standards Committee of the Intensive Care Society (ICS) and the Faculty of Intensive Care Medicine reviewed and approved these guidelines (FICM).

### Risk factors

The ability to produce tears, blinks, and close the eyes with rest or sleep is crucial to the health of the front surface of the body,

especially the cornea (the clear front window of the eye). Lagophthalmos is the medical term for an incomplete eyelid closure. Disease (e.g., facial oedema, decreased conscious level, peripheral or central neurological injury) or treatments can disrupt any of these mechanisms in ICU patients (e.g. the drying effects of gas flows from CPAP or oxygen masks).

### Protective measures

ICU patients' eyes can be protected using a number of techniques. There are some of them: Closing the eyes manually or with tape is an option. Lid taping isn't always appropriate, and it can be upsetting for family members. Additionally, repeated removal can cause facial skin or eyelid damage or discomfort. As a result, it can only be used when absolutely appropriate. Ointment (such as clear eye ointment, Lacrilube™, and VitA-POSTM) is recommended instead of drops since drops do not last long enough. As seen in Figure 2, this must be implemented correctly into the eye. This method outperforms both manual eye closure and the (once-common) application of Geliperm. To remove dried ointment, first wash your eyes with warm water. Until applying the next lubricant, inspect the eye with a bright light to check for redness, chemosis, or corneal dullness or opacity. If these are discovered, the medical staff should be notified (and a referral to an ophthalmologist considered) and lubrication should be significantly increased [3]. Exposure keratopathy can be avoided with the use of simple procedures, which can improve patient safety in the intensive care unit.

### REFERENCES

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