Assessment of knowledge, practice and compliance of eye care guidance in neuro critical care unit.

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INTRODUCTION

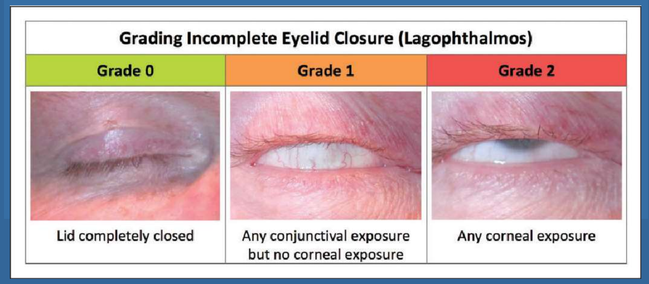
Ocular complications in critically ill patients are common. Up to 42% of intensive care unit patients can have signs of damage to the corneal surface of the eye (exposure keratopathy), which can lead to secondary complications and ultimately irreversible visual loss [1,2](Rosenberg and Eisen, 2008; Bird et al, 2017).

Emergence of COVID 19 pandemic has meant increased number of critical care admission with inherent risk of ocular complication owing to need for non-invasive ventilation, mechanical ventilation and prone ventilation. All these factors have resurfaced need for increased awareness and adherence to national standards related to eye care in critical care[3] (Royal college of Ophthalmology and Intensive Care Society joint Ophthalmic service guidance).

METHODS AND MATERIALS

Following institutional audit board approval we conducted a snapshot review of eye care practices in ICU using hospital information system between May & June 2021. This was combined with a structured online survey on eye care practices among critical care nurses

Data is presented as frequency and percentages.



RESULTS

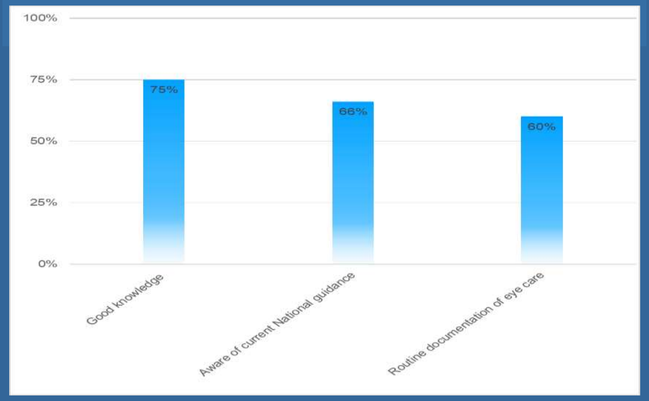
We ran baseline survey among neuro critical care nurses on knowledge and current practice of eye care in ICU. Eye care complications in ICU are common with 1 in 5 individual reporting > 3 ocular complications in last 3 months. Three-quarter of individuals reported to have good to very good knowledge of eye care protocol with 66% aware of current national guidance. We found 86% assessed lagophthalmos while 76% assessed conjunctiva and cornea routinely. On the flipside however only 60% routinely documented eye care measures in clinical practice. Importantly, 96% responded that they would benefit from education and training in eye care practices.

Review of hospital records for eye care compliance and documentation validated the findings on survey. We found 68% compliance rate for assessment of lagophthalmos in all admitted patient in neuro critical care unit. There was 100% compliance to protective measures and escalation to medical staff.

	Standard	Compliance Percentage n=50
1.	100% of Assessments of eyelid closure should be done at the onset of the care plan in all ICU patients	68%
2.	100% of patient should have protective actions instituted according to the grade of severity of lagophthalmos	100%
3.	Assessment of eyes for redness/stickiness or corneal haze should be performed for all ICU patients.	78%
4.	Medical staff should be alerted and ophthalmology referral should be done if criteria met	100%

Discussion & Conclusion

Knowledge and awareness of eye care practices fall below national guidance. There is clear gap in knowledge, practice and documentation of eye care practices.
Incorporation of eye care module in continuous training program and use of cognitive aids may help to further improve compliance and documentation eye care practice in future.



Graph:1 Baseline survey among critical care nurses

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