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EYE CARE IN THE INTENSIVE CARE PATIENTS: AN EVIDENCE BASED REVIEW

Zahra Taheri-Kharameh. Students Research Center, Department of Public Health, Hamadan University of Medical Sciences, Hamadan, Iran.

10.1136/bmjopen-2016-015415.177

Background and aims: A complication of sedation and coma is that some patients are unable to maintain effective eyelid closure. These patients present a higher risk of eye complications. However, in the intensive care unit (ICU), treatment is usually focused on the management of organ failures, and eye care becomes a side issue. Early diagnosis and effective treatment will help prevent microbial keratitis and visual loss. To identify the best available evidence in providing the best eye care to prevent exposure keratopathy, a literature review was performed.

Methods: A literature review was conducted using electronic databases of Pub-Med and Google scholar to identify citations published in English language between 2005 and 2016, using the keywords 'keratopathy', 'eye care', 'dry eye', 'intensive care', 'critical patients'. Identified titles and abstracts were screened separately by researchers for relevance and eligibility and papers were independently assessed for inclusion. Data were abstracted from included papers and quality evaluation of included papers was conducted. The papers were analyzed and reported in a narrative synthesis.

Results: Generally eye care measures were including lubricants (ointments, drops, normal saline irrigation of the eyes), chambers (polyethylene covers, swimming goggles, shields, pads, eye patch), eyelid closure (taping the eyes closed with transparent tape, tarsorrhaphy). Among various eye care measures that have been advocated to prevent exposure keratopathy, the most effective is the application of polyethylene moisture chamber.

Conclusion: With application of simple protocols, exposure keratopathy can be prevented, thus improving patient care in the intensive care unit. ICU staff should be educated about the eye care of critical care patients.