



Providing Education to Reduce Corneal Abrasions in Patients Undergoing Spine Surgery

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BACKGROUND

- Corneal abrasions (CAs) are considered the most common corneal complication that occurs in patients in the perioperative period, for non-ocular surgeries undergoing general anesthesia.
- Perioperative CAs can cause several unpleasant sequelae including pain, ocular infection, and vision loss.
- Studies argue that spine patients are at an increased risk due to decreased awareness of contact with patient's face, specifically the eyes. Patients in the prone position are at increased risk.
- There was no formal training for BIDMC perioperative nurses on these risks or a system to track and document the occurrence of CAs.

PICO QUESTION

Does the implementation of perioperative education regarding the prevention, treatment, and proper documentation of the incidence of corneal abrasions lead to a decrease in the occurrence of CAs in adult patients receiving general anesthesia for spinal surgery in the prone position?

METHODS/EVIDENCE

- A baseline incidence rate of corneal abrasions was established, and a best practice was implemented to standardize CA prevention, diagnosis, and treatment throughout the perioperative period.
- A PowerPoint presentation was given to the staff to educate them regarding prevention and documentation of CAs to determine if modifications and additional improvement may be needed. A 3-month timeline was set.

SIGNIFICANCE OF FINDINGS

Following this change in practice, a notable decrease in the incidence of perioperative CAs on spinal patients occurred from 3 out of 202 (1.49%) during the months of July through September to 0 out of 155 (0%) in the three months following perioperative staff education.

IMPLICATIONS

Nurses are the most significant portion of the healthcare workforce and are critical to keeping patients safe from harm or injury. Perioperative education was associated with fewer complications associated with CAs.

Corneal Abrasion Incidence

