Reduction of Corneal Abrasions in GI Lab Demonstrated with Standardized Eye Care

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Introduction

Recently, the Anesthesiology Department began providing anesthesia for upper GI procedures and colonoscopies at OMC. After a short period of time, it was noted that there was a large increase in the incidence of corneal abrasions.

Methods

A review of the cases revealed that most of the abrasions involved colonoscopies and involved the “down” eye that was resting on the pillow. A standardized protocol was developed for management of eye care during these cases. This included staff and patient education and taping the “down” eye closed. The management of these cases was discussed in the Anesthesiology department’s patient safety conferences and was documented in the department’s Standard Operating Procedure manual. Additionally, the Ophthalmology department was contacted to determine the necessity of ophthalmology consults for all patients who reported symptoms of corneal abrasions. A protocol was implemented which stated that barring any obvious injury or no relief with the administration of fluorescein dye, an ophthalmology consult was not required. What is a corneal abrasion?
The cornea is the clear outermost layer of the eye. When small foreign objects get between your eye and the lens, you may develop a scratch or irritation of the cornea. This is known as a corneal abrasion.

What can cause a corneal abrasion?
There are two main types of corneal abrasions:

- The first type occurs when a corneal abrasion occurs when a grain of rice in the injured eye three times a day. Place a dab of ointment the size of a grain of rice in the injured eye. In the past, doctors have told people with corneal abrasions to wear eye patches. More recently, studies have shown that eye patches do not help and may even make abrasions worse. Do I need a follow-up for a corneal abrasion?

- If you have a corneal abrasion and think you may need a follow-up, please contact your primary care physician or the Ochsner Ophthalmology Clinic.

- If you do not need a follow-up, you may call 504-842-3995.

Common symptoms are light sensitivity and feeling like sand or grit in your eye. You may bleed or have a red eye. The vision may be blurry.

If the pain is not resolved in three days, you may need to follow up with your primary care physician or the Ochsner Ophthalmology Clinic.

Results

Incidence of Corneal Abrasions 2013-2016

<table>
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<tr>
<th>Year</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
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<tbody>
<tr>
<td>Incidence</td>
<td>2</td>
<td>3</td>
<td>1</td>
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The standardized protocol was developed in house due to the high number of corneal abrasions observed. As indicated in the anesthesia consent form, a corneal abrasion is a common complication of surgery or a procedure. The incidence of corneal abrasions for upper GI procedures and colonoscopies at OMC was noted. The overall incidence of corneal abrasions was noted. The incidence of corneal abrasions was noted. An initial decrease in frequency of corneal abrasions was noted in our department’s quality surveillance system. After thorough analysis, potential causes were identified and management strategies were implemented to resolve this issue. An initial decrease in overall incidence of corneal abrasions was noted. Anesthesiology continues to track this very closely. Future plans include trialing antibiotic drops instead of ointment and different types of adhesive tapes.

Discussion

Corneal abrasions continue to be the most frequently reported ocular complication during general surgery. This complication has been delineated and improved. The incidence, etiology, and effective measures for prevention in the GI lab are not as clearly defined. In Anesthesiology’s current practice, trends have been identified and care and strategies implemented with intent to minimize this complication. In this environment, the majority of these abrasions or complications resolve quickly and require minimal therapy/consultations.

Conclusion

After expanding Anesthesiology services to the GI suite, corneal abrasions incidents were reported to our department’s quality surveillance system. After thorough analysis, potential causes were identified and management strategies were implemented to resolve this issue. An initial decrease in overall incidence of corneal abrasions was noted. Anesthesiology continues to track this very closely. Future plans include trialing antibiotic drops instead of ointment and different types of adhesive tapes.