Tips from the Trenches

Corneal Limbal Foreign Bodies

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CASE STUDY

A 30-year-old man presented to the eye casualty department with a 2-day history of a foreign body sensation in the left eye. He had recently been grinding metal. On examination, he had a small ferrometallic foreign body at the 9 o'clock position on the left cornea. There was associated engorgement of the bulbar conjunctival vessels.

TEACHING PEARLS

Corneal foreign bodies are a common problem presenting to the emergency department. Usually, these are easily removed under topical anesthesia with visualization by the bimicroscope (slit-lamp). Occasionally, the foreign body may be embedded at the limbus. This is a highly vascular area that has a tendency to bleed, thus hindering removal of such foreign bodies.

Phenylephrine is an α_1-adrenergic receptor agonist. A 2.5% topical preparation has a favourable side-effect profile and is commonly used for its mydriatic action. By merit of its vasoconstrictive properties,[1] one drop of topical phenylephrine 2.5% instilled in the inferior fornix 5 minutes prior to attempting foreign body removal reduces limbal vascular congestion, thereby minimizing bleeding (Figure 1). Patients should be informed of a possible temporary blurring of vision for 3 to 4 hours following instillation owing to mydriasis. We recommend this safe and useful adjunct to ease the

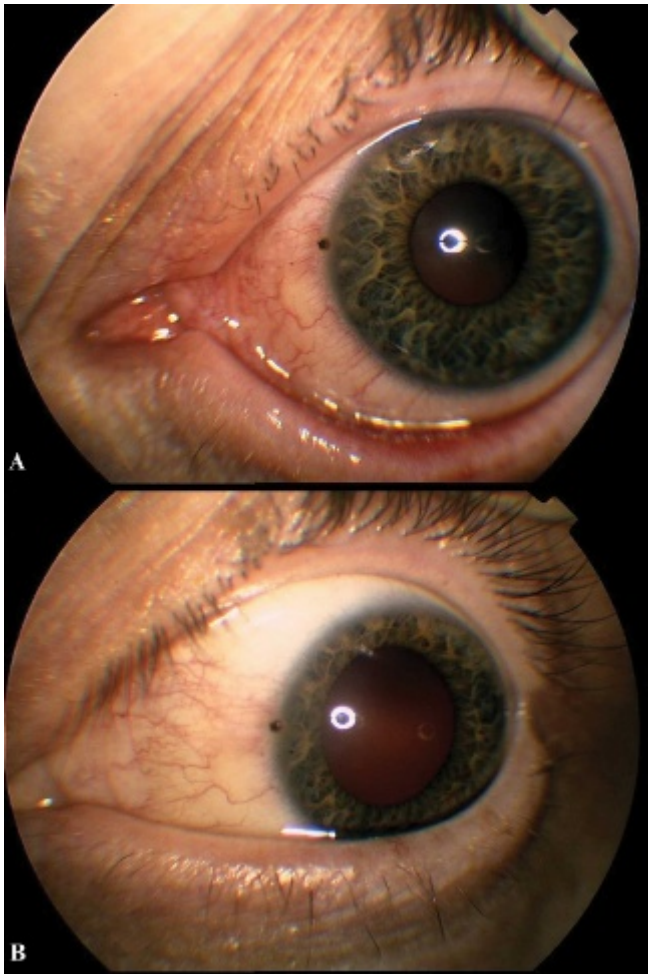

Figure 1. *A*, Corneal limbal foreign body prior to instillation of topical phenylephrine 2.5%. *B*, Corneal limbal foreign body after instillation of topical phenylephrine 2.5%. Note the reduction in limbal vascular congestion.

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removal of limbal foreign bodies and reduce the potential for iatrogenic injury.

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