



Procedure: Lateral Canthotomy

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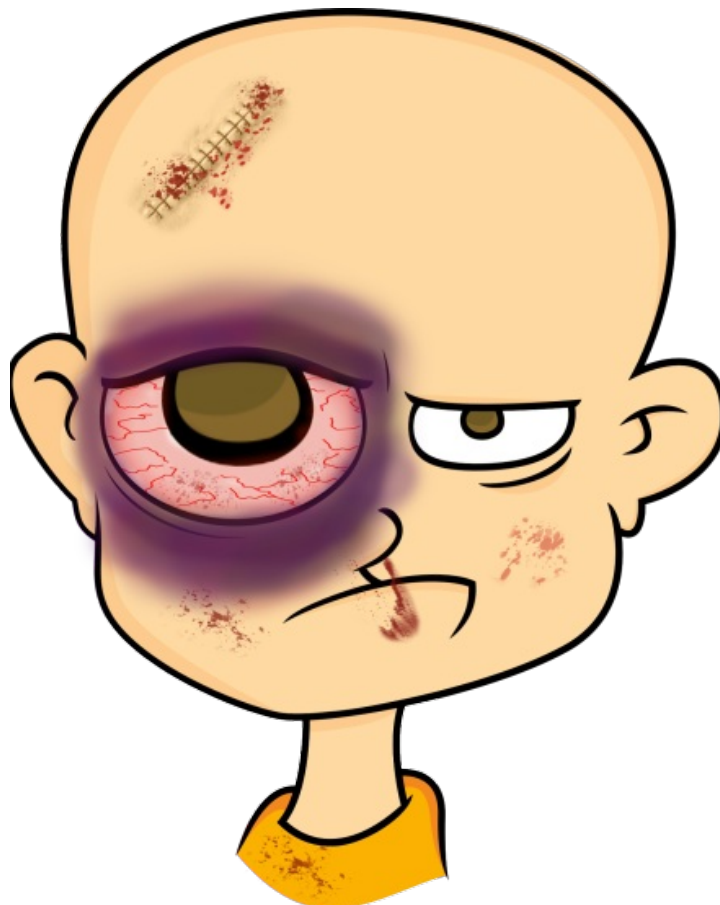
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KEYWORDS:

emergency medicine,
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canthotomy, trauma,
retrobulbar hematoma

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A 21 year old man was minding his own business on a street corner, when out of nowhere two dudes just jumped him. His primary injury appears to be to his right eye. He is complaining of a lot of eye pain and blurred vision. On exam, you note proptosis and an afferent pupillary defect. The ophthalmologist is covering at another hospital and is at least an hour away, but suggests you go ahead with the lateral canthotomy...

EQUIPMENT

- Chlorhexadine
- Lidocaine (with epi)
- Needle and syringe for lidocaine injection
- Straight mosquito hemostat

- Iris scissors
- Forceps

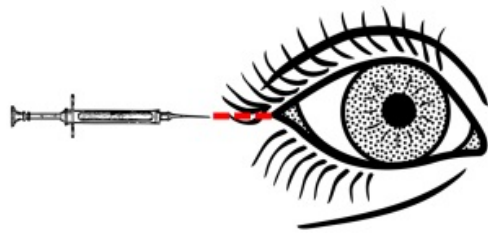
MY APPROACH

Explain the risks and benefits.

Consider sedation as required.

Clean the skin with chohexadine.

Inject local anesthetic from the lateral canthus to the orbital rim. (Ignore the needle in the picture - direct the needle tip away from the globe.)

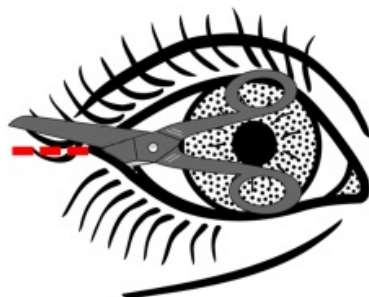


Irrigate the eye with saline to clear any debris.

Slide a straight mosquito hemostat along the lateral canthus, with one prong against the orbit and the other superficial to the skin. Compress this tissue for 1 minute to minimize bleeding.

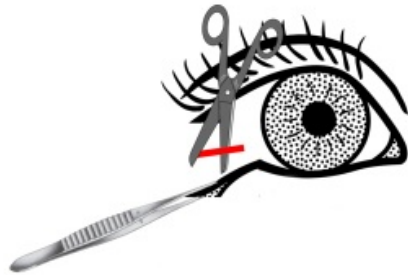


Along this same path, cut all layers of tissue with the iris scissors.



Grasp the lower eyelid with forceps and retract it to reveal the lateral canthal tendon. (The tendon is just inferior and posterior to the lateral canthal fold.)

Cut completely through the middle of the lateral canthal ligament with the iris scissors.



OTHER FOAMED RESOURCES

The the whole process in a series of excellent, short cadaver videos:[Lateral Canthotomy and Cantholysis](#) at [wikemerg.ca](#)

[Bashed, Blind and Bulging aka Ophthalmology Befuddler 033](#) at LITFL

REFERENCES

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Minnes G and Howes D. Lateral canthotomy and cantholysis: a simple, vision-saving procedure. CJEM. 2002;4(1):49-52. At: <http://www.cjem-online.ca/v4/n1/p49>