Expulsive choroidal hemorrhage is the most feared intraoperative complication of CE surgery. What is the classic first sign?
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**Darkening of the red reflex**

In what manner will this darkening commence and progress?
Expulsive choroidal hemorrhage is the most feared intraoperative complication of CE surgery. What is the classic first sign? Darkening of the red reflex

In what manner will this darkening commence and progress? It will commence on a side, and proceed across the pupillary aperture.
Expulsive Choroidal Hemorrhage

Ruh roh, Shaggy
Expulsive choroidal hemorrhage is the most feared intraoperative complication of CE surgery. What is the classic first sign? Darkening of the red reflex.

What will the pt report at this juncture?
Expulsive choroidal hemorrhage is the most feared intraoperative complication of CE surgery. What is the classic first sign? Darkening of the red reflex

What will the pt report at this juncture?
The sudden onset of pain, which may be severe
Expulsive choroidal hemorrhage is the most feared intraoperative complication of CE surgery. What is the classic first sign? **Darkening of the red reflex**

What is the classic ‘late’ sign?
Expulsive choroidal hemorrhage is the most feared intraoperative complication of CE surgery. What is the classic first sign? Darkening of the red reflex

What is the classic ‘late’ sign? Expulsion of the intraocular contents through the wound
Expulsive choroidal hemorrhage

Early stage with vitreous prolapse and wound gape

Expulsive choroidal hemorrhage
Expulsive choroidal hemorrhage

Early stage with vitreous prolapse and wound gape

Late stage of the same case with extrusion of intraocular contents, including the retina

Expulsive choroidal hemorrhage
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How should it be managed intraoperatively?
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2)
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How should it be managed intraoperatively?
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Real talk: How likely is it that intra-op sclerotomies will successfully drain the blood?

Because it clots very rapidly in the suprachoroidal space

What may need to occur before the blood can be removed?

Clot liquefaction

How long post-event does liquefaction occur?

7-14 days

How can you tell that liquefaction has occurred?

Serial b-scans (an experienced sonographer can recognize u/s signs of liquefaction)
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What's the problem, ie, why won't the blood drain?

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Post-op, how should IOP be managed?
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Post-op, how should IOP be managed? Leave it elevated (will tamponade the bleed)
Delayed choroidal hemorrhage is another complication of cataract extraction. How does it present?

- Sudden pain
- Decreased vision
- Shallow AC

How should it be managed?

- Cycloplegia
- Drainage if 'kissing choroidals'
Delayed choroidal hemorrhage is another complication of cataract extraction. How does it present?

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Delayed choroidal hemorrhage: Shallow AC
Delayed choroidal hemorrhage is another complication of cataract extraction. How does it present?

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How should it be managed?

- Medically
- Surgery
Delayed choroidal hemorrhage is another complication of cataract extraction. How does it present?

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How should it be managed?

- Medically with cycloplegia + steroids + hypotensives
- Surgery
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Should topical, or systemic steroids be used?
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How should it be managed?

- Medically with cycloplegia + steroids + hypotensives
- Surgery should be considered if:
  - The AC is unacceptably shallow
  - The IOP is unacceptably high
  - 'Kissing choroidals' are present
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What does it mean to say choroidals are kissing?

It means they are causing the retinal surface to appose itself. Why is this a problem? Because if the retina apposes itself for too long, an adhesion may form between them.
Delayed choroidal hemorrhage is another complication of cataract extraction. How does it present?

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Delayed choroidal hemorrhage: $b$-scan

Appositional (‘kissing’) hemorrhagic choroidal detachments
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How should it be managed?
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