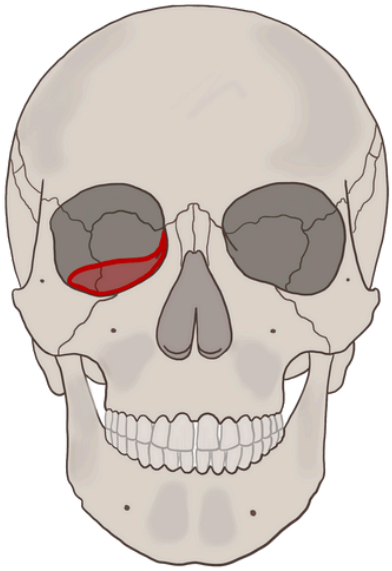
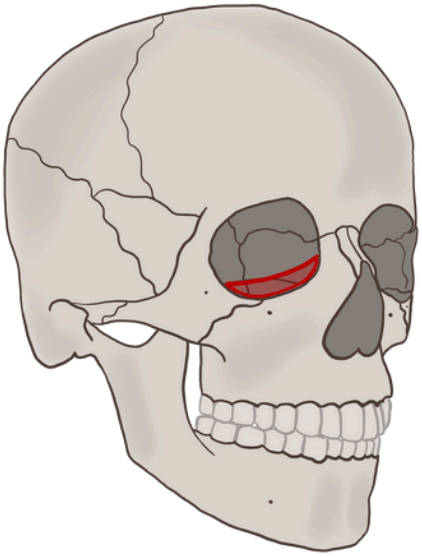
ONTARIO ASSOCIATION OF CRANIOFACIAL TRAUMA SURGEONS

(OACTS)

ORBITAL FLOOR/ BLOWOUT FRACTURES





What is it?
Fractures of the orbital floor and the medial orbital wall (blowout fractures)

How does it happen?
A blunt, directed force (e.g., vehicle collision, sports, fall, trauma)

Signs of an orbital floor fracture:

- Swelling/bruising at rims of eyes
- Blood in the conjunctiva
- Inability to move the eye in all directions
- Sinking or bulging of the eye
- Double or blurry vision
- Sensation change to cheek and upper teeth

How is it diagnosed?
CT of facial bones

Indications for Surgery:
1. Muscle entrapment (inability to move the eye)
2. Enopthalmos greater than 2mm
3. Persistent double vision (diplopia)
4. A large defect

Risks of Surgery:

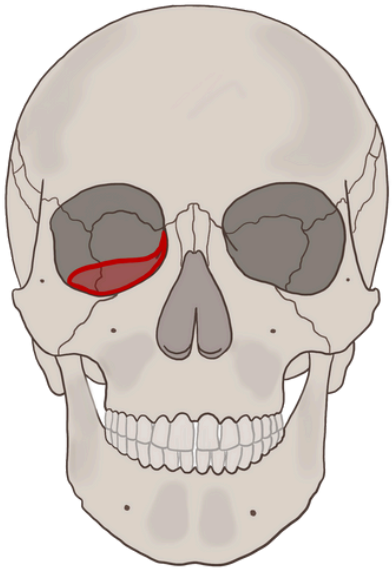
- Risks of general anesthetic
- Infection
- Bleeding (retrobulbar hematoma)
- Temporary worsening of double vision, may take up to 18 months to resolve
- Vision loss (1/100 000 incidence)
- Corneal abrasion
- Ectropion (dropping of lower eyelid)
- Malpositioning of implant requiring revision surgery

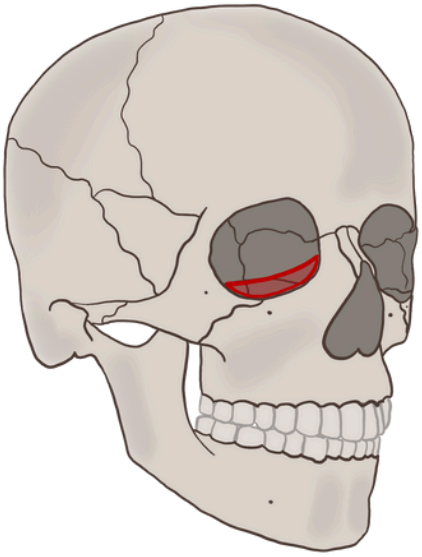
*Smoking and alcohol use are associated with a higher rate of complications.

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Surgical Incisions to Expect
Every fracture and incision is different, surgical type and exposure will depend on each unique patient fracture.

Please speak to your surgeon to gain a better understanding of what to expect.

Typical incisions include:

- lower eyelid through the skin (transcutaneous)
- inside the lower eyelid (transconjunctiva)

If your injury involved a cut on your face, it may be used to surgically expose the fracture. If you have sustained other fractures at the same time, incisions may differ.

Tips Before Surgery
After you are diagnosed with an orbital floor fracture, you will be placed on sinus precautions.

Sinus precautions include:

- Avoid blowing your nose: this can cause your fracture to increase in size and can cause worsening swelling
- Sneeze only with your mouth open and avoid pinching your nostrils
- Do not use a straw to drink, drink directly from a cup
- Keep the head of your bed elevated at 30°: this will help reduce swelling

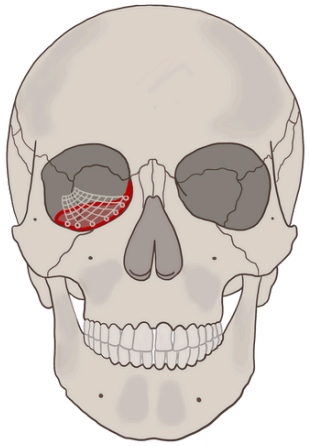
Present to the emergency room if you experience vision loss, inability to move your eye, new bulging of the eye, or uncontrolled bleeding.

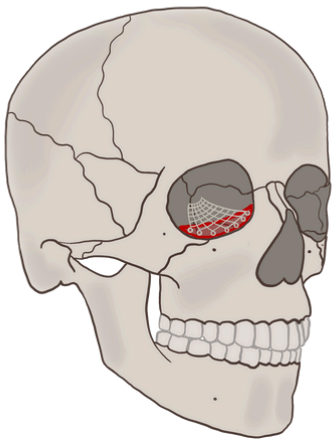
ONTARIO ASSOCIATION OF CRANIOFACIAL TRAUMA SURGEONS

(OACTS)

ORBITAL FLOOR/ BLOWOUT FRACTURES

POST-OPERATIVE CARE





Treatment

Surgical Management

- Uncomplicated fractures: if fracture is non-displaced or minimally displaced, and there are no changes to your vision and eye movements, you may not require surgery and will be under observation
- Displaced/mobile fractures: open reduction internal fixation (ORIF) procedure is needed using an implant to reconstruct the floor of the orbit

Additional Management

- You will be kept upright (at least 30°) after surgery to decrease pain and swelling
- Sinus precautions will continue for 6 weeks including:
  - No nose blowing
  - Sneeze with your mouth open only and don't pinch nostrils
  - Do not use a straw, continue to drink directly from a cup

Medications

- Pain management: acetaminophen, NSAIDs, and/or opioids
- Antibiotics: if the fracture involves teeth, gums, mucosa
- Sore throat/nasal congestion: over-the-counter nasal decongestant (e.g., Benadryl)

Diet

- There are no diet restrictions for isolated orbital floor fractures

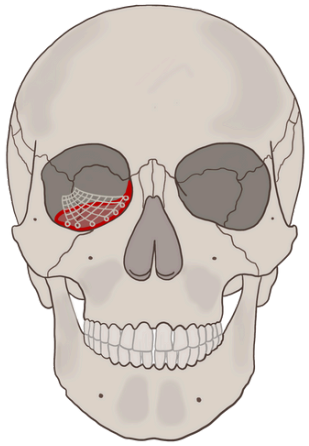
If you have sustained other fractures at the same time as your orbital floor fractures, you should consult the corresponding handout for any diet restrictions.

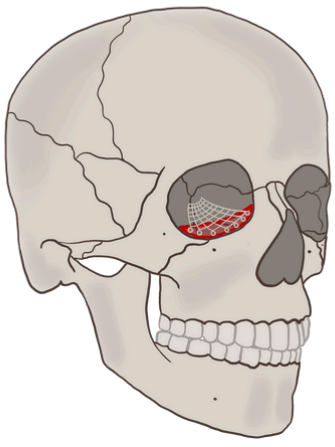
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ORBITAL FLOOR/ BLOWOUT FRACTURES

POST-OPERATIVE CARE





Activity

- Physical activity should be kept to a minimum for at least 6–8 weeks after surgery
- Contact or other sports should be avoided for up to 3 months to minimize the risk of another fracture
- Be cautious with kids and animals for 6-8 weeks (avoid rough play, risk of re-injury)
- Do not go scuba diving for at least 6 weeks

Wound Care

- For the first 48 hours after surgery, use ice packs to help minimize swelling
- Shower normally, if surgical tapes are used, you can shower but pat them dry
- Surgical tapes will be removed within 5-7 days

If you have sustained other fractures and you have an incision in your hair (coronal), you can wash your hair immediately after surgery and apply polysporin. Please see the corresponding handout for any additional fractures you may have sustained.

Seek care if you experience:

- Fever over 38°C, new redness, swelling, pus, or foul odour discharge
- Acute change in vision, double vision, or vision loss
- Inability to move the eye
- Acute onset pain/pressure around the eye with bulging (retrobulbar hematoma)

Please contact your surgeon or present to the nearest emergency department.