

Surgical approaches to the midface



Version 2 (December 12, 2018)

Faculty can replace the clinical images in the presentation with equivalent images

Learning objectives

- Describe different surgical approaches to the midface
- Identify important anatomical structures and landmarks

Incisions

- Coronal
- Upper eyelid
- Lower eyelid
- Vestibular (upper buccal sulcus)

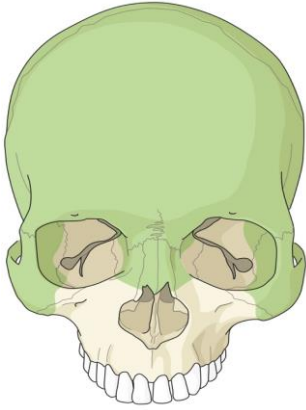
- Existing lacerations



Don't forget potential use of existing lacerations
Use clinical photo from SGD?

Coronal incision

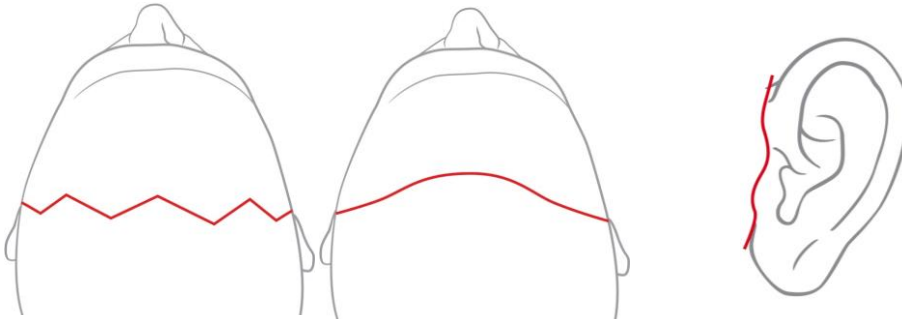
Access to upper and middle third



 AOCMF

- Calvarial vault
- Anterior/lateral skull base
- Frontal sinus/ethmoid
- Zygoma and arch
- Orbit
- Nasal dorsum
- TMJ and condylar/subcondylar region

Coronal incision



Positioned near vertex
to reduce visibility

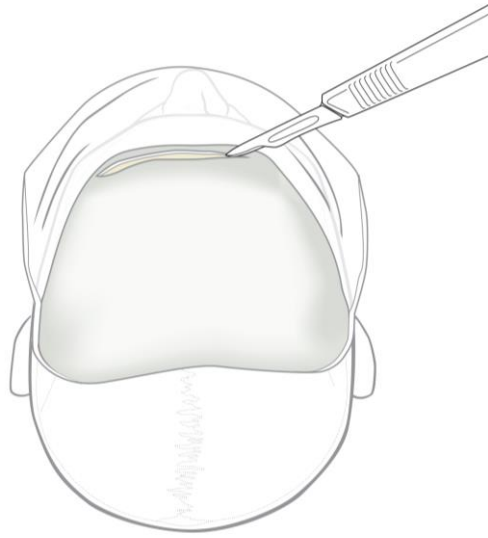
Can be extended in
front of (or behind)
the ear



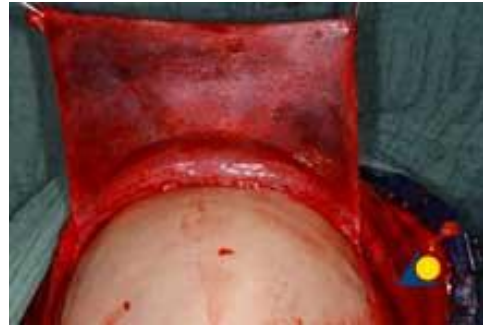
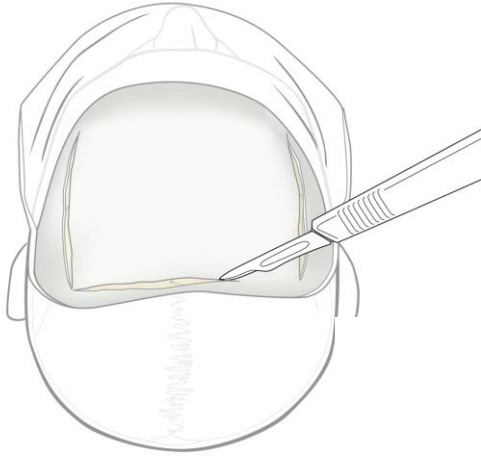
Mention stealth incision and can discuss added benefit to reduce visibility.

Coronal incision

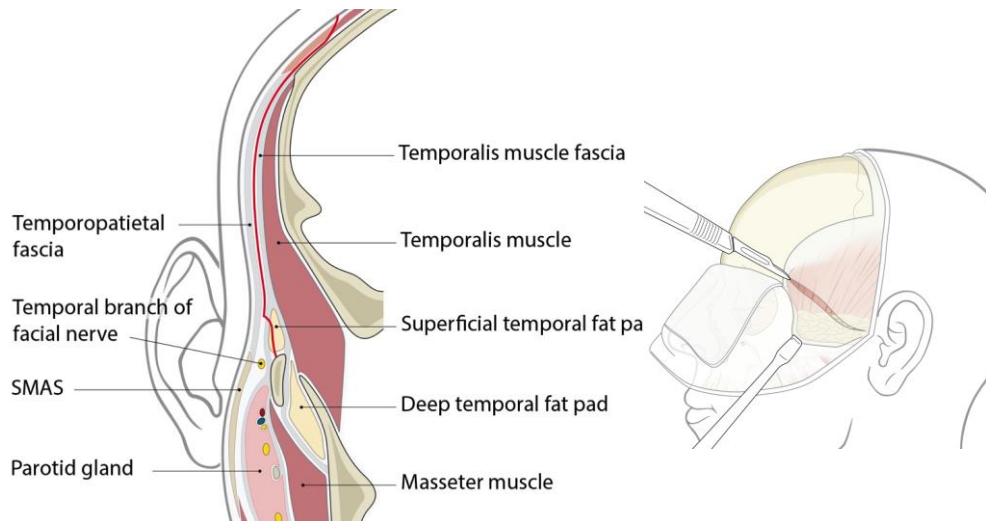
- Beveling knife may reduce scar alopecia
- Subgaleal dissection
- Incise periosteum 2.5 cm above supraorbital rim



Alternatively, may raise pericranial flap



Lateral dissection



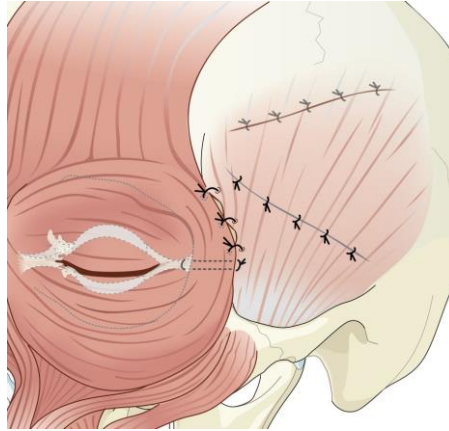
Facial nerve branches lie just above the superficial leaf of the deep temporal fascia



Note for faculty: Need to emphasize the transition of the incision depth to protect the facial nerve

Soft-tissue suspension

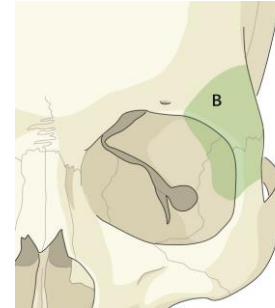
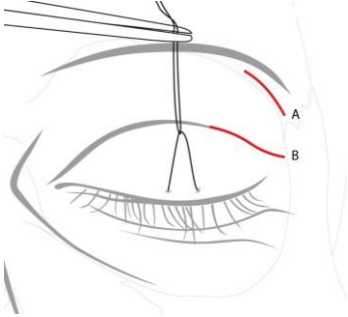
- Lateral orbital rim
- Superficial temporal fat pad
- Superficial temporal fascia
- Resuspension of temporalis muscle if elevated



Upper eyelid incision

Allows exposure and repair of:

- ZF suture
- Lateral orbital wall
- Lateral canthus

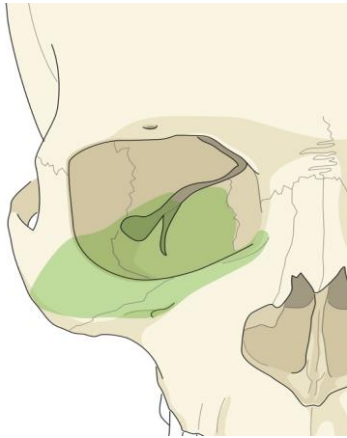


A = brow incision
B = upper blepharoplasty incision

Lower eyelid incisions

Allows exposure to:

- Infraorbital rim
- Zygomatic body
- Orbital floor



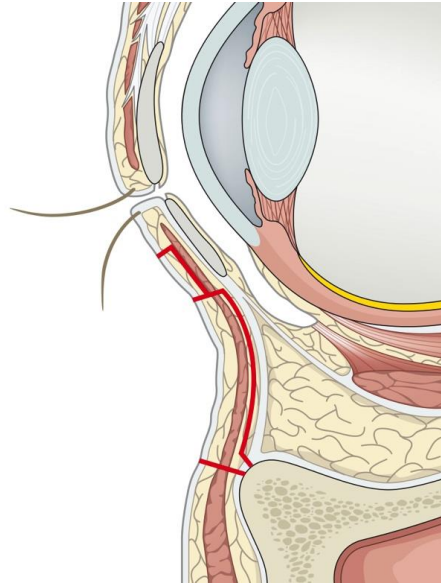
 AOCMF

Describe the lateral extension incision on the left eye

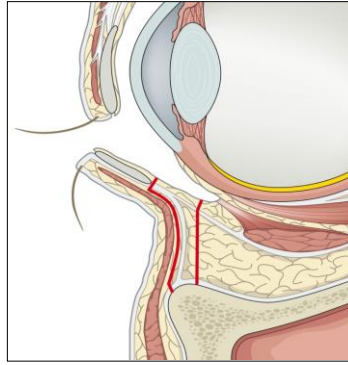
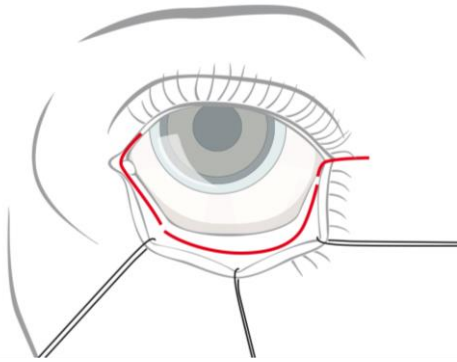
Lower eyelid dissection

All incisions allow:

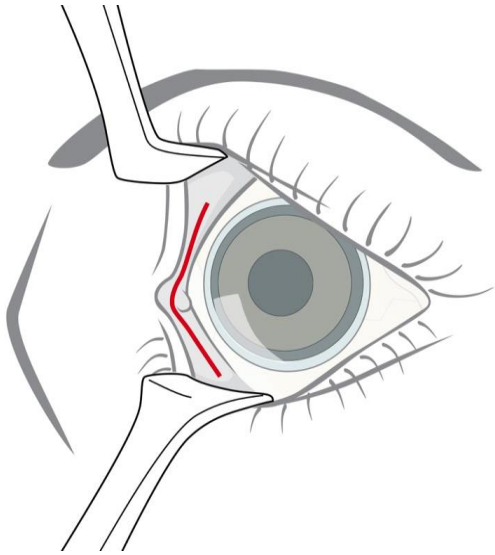
- Preseptal dissection
- Minimizing injury to orbital fat
- Reducing scarring of septum



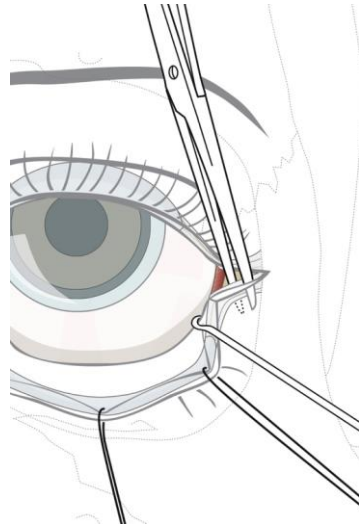
Transconjunctival incision



Medial and lateral extensions



Allows medial
wall exposure



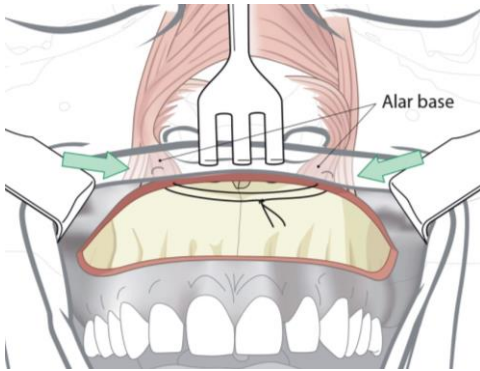
Allows exposure and plating
of infraorbital rim and ZF
suture

Vestibular (upper buccal sulcus)

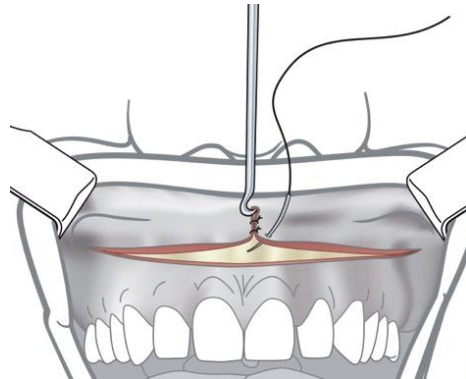


Incision is at least 5 mm above attached gingiva to allow for closure

Incision closure



Alar cinching suture to reduce alar base widening



Closure with V-Y to maintain lip length and evert mucosa

Take-home messages

- To expose the entire midface skeleton:
 - Coronal
 - Lower eyelid
 - Vestibular (upper buccal sulcus)
- Resuspend soft tissues and closure in layers to reduce postoperative deformities