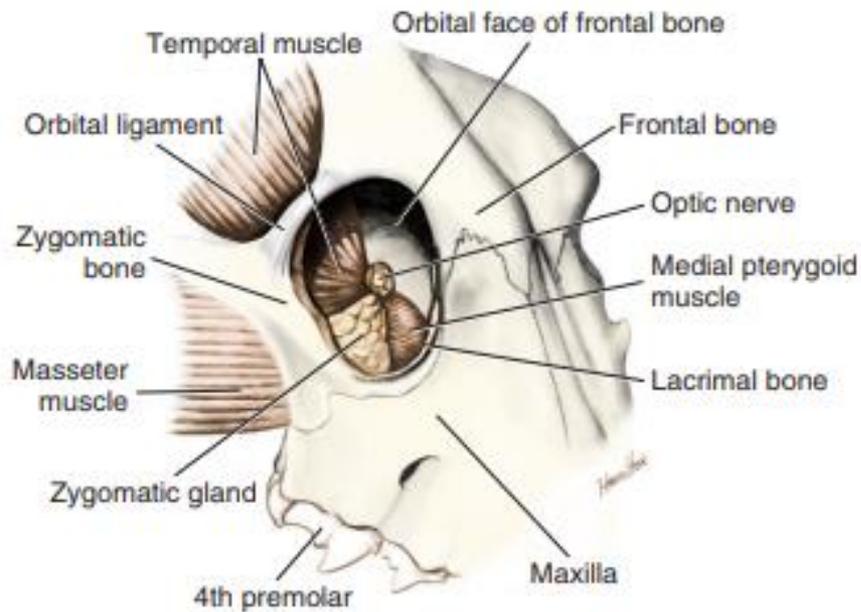


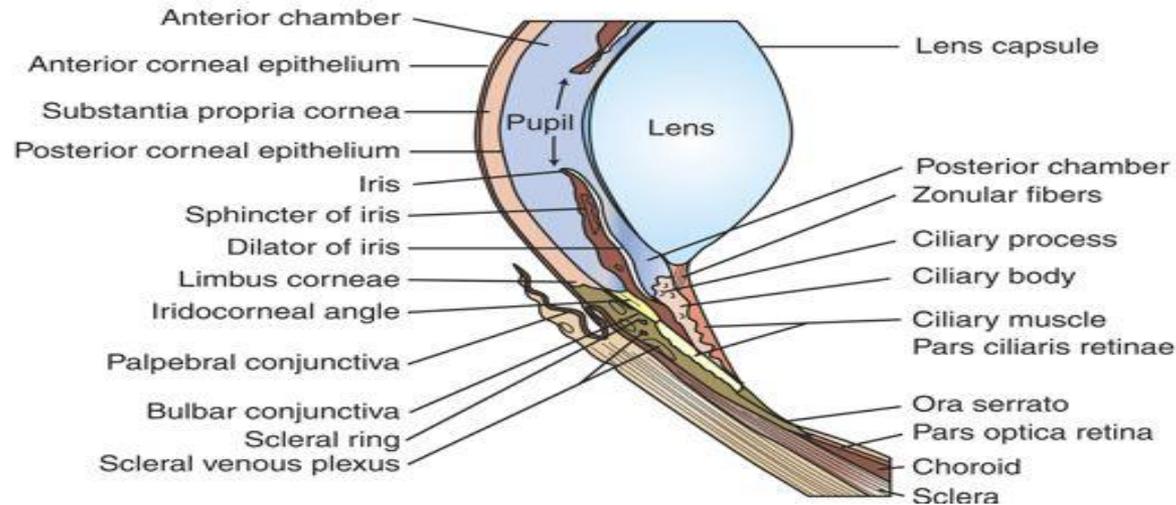
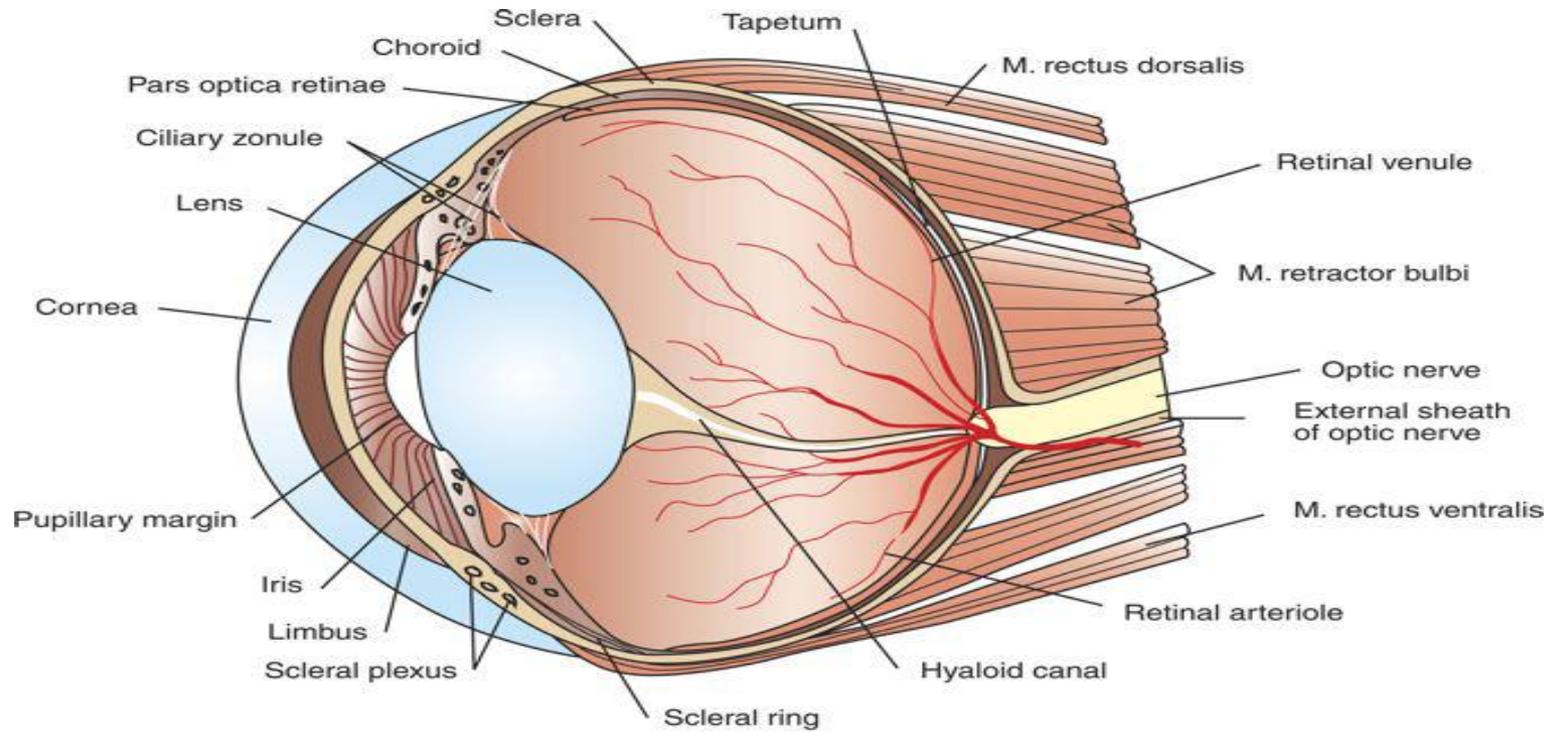
# ***Anatomy of the Eye***

- ***Eyeball***
- ***Eyelids***
- ***Muscles***
- ***Lacrimal apparatus***
- ***Orbit***



**FIGURE 21-16** The right orbit, orbital contents removed, viewed along orbital axis.







## ***Vascular system of eye***

**External carotid artery → internal**

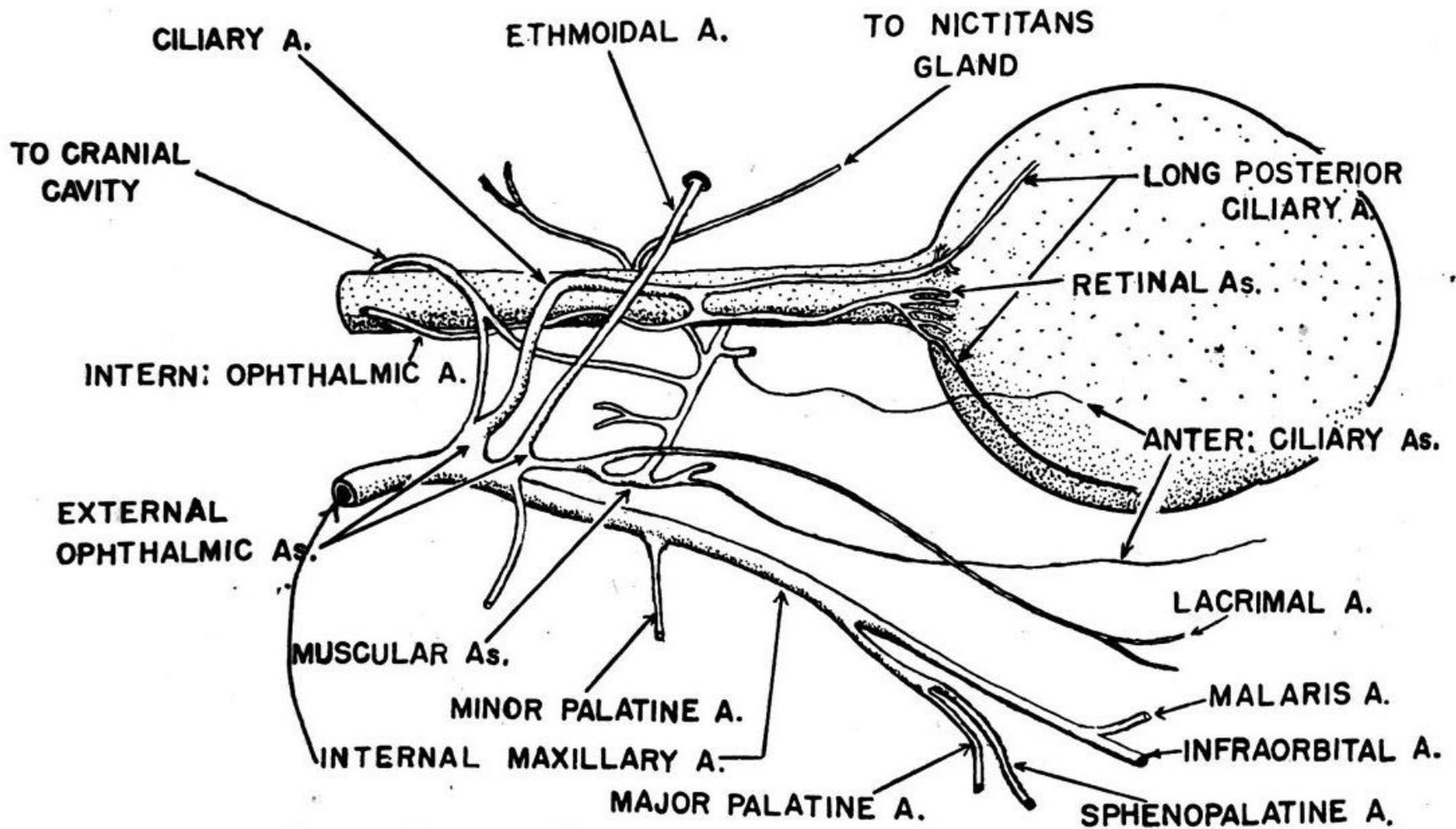
**maxillary artery → 2 branches**

**Ext.ophthalmic art. → ciliary through  
the vascular tunic and sclera :**

➤ **4-6 short post. ciliary art. Within  
choroid**

➤ **2 long post ciliary art run between  
sclera and choroid give branches to the  
ciliary muscle, ciliary process and iris.**

➤ **Anterior ciliary art. Branch to conj,  
sclera, ciliary muscle and limbal region**



# Extraocular muscles

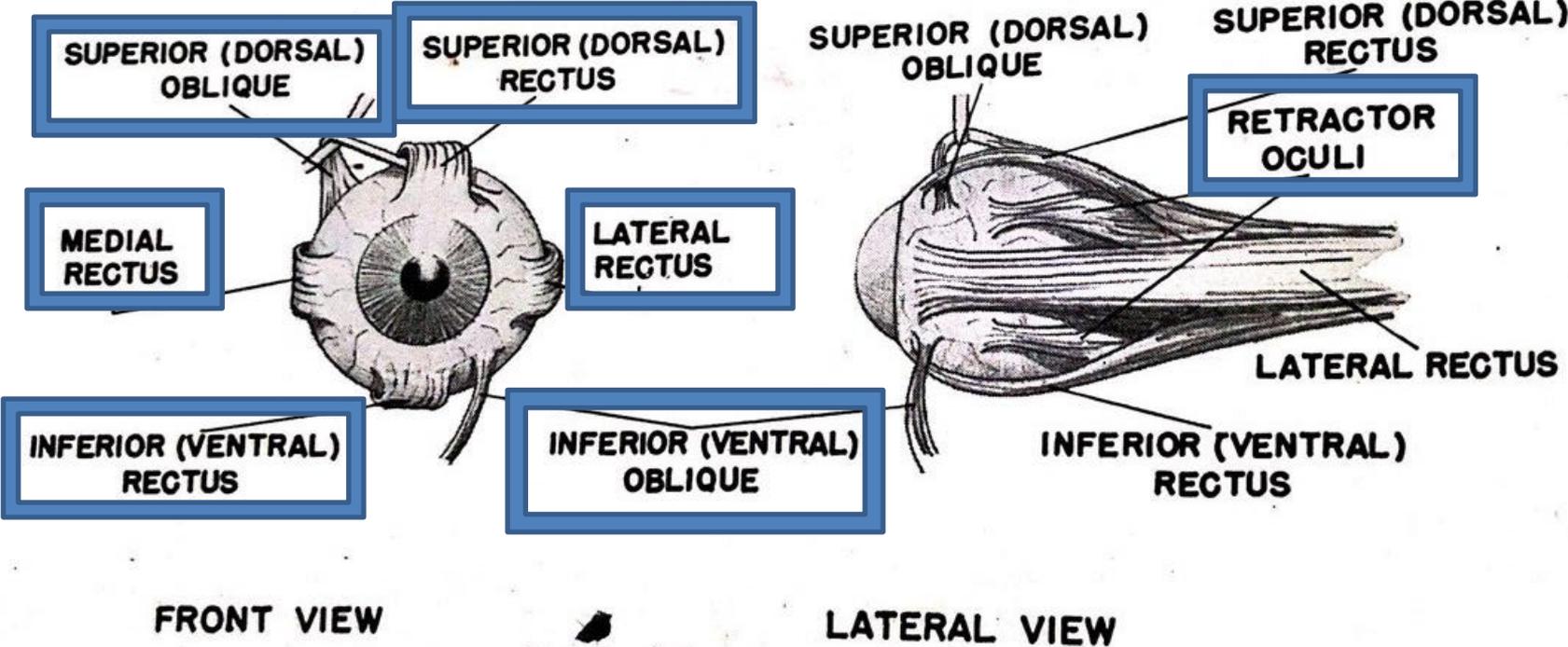


Fig. 4. The extraocular muscles.

# ***General nerve supply:***

- ***Second ( optic nerve)***
- ***Third (oculomotor): motor fibers to superior, inferior and med rect, inferior oblique, ciliary muscle***
- ***Fourth (trochlear): superior oblique***
- ***Fifth (Oph branch): lid, conj, cornea dilator of iris***
- ***Sixth (abducens): Lat rect***
- ***Seventh (facial): Orbicularis oculi***

# **Extirpation of Eye**

(Transpalpebral enucleation/exenteration)

## **Indications**

- 1. Suppurative Panophthalmitis following FB or disease**
- 2. Irreplaceable and/ or gangrenous luxated eyeball with nerve and vessel rupture**
- 3. Sever irreparable injuries in eyeball**

- 4. Pain in a blind eyeball**
- 5. Massive anterior staphyloma if the eye is blind**
- 6. The occurrence of chronic conjunctivitis, corneal or eyelid disease due to an acquired phthisis bulbi or congenital microphthalmia**
- 7. The presence of an intraocular or retrobulber malignant neoplasm.**

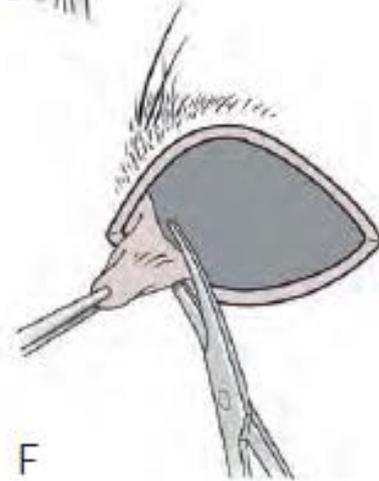
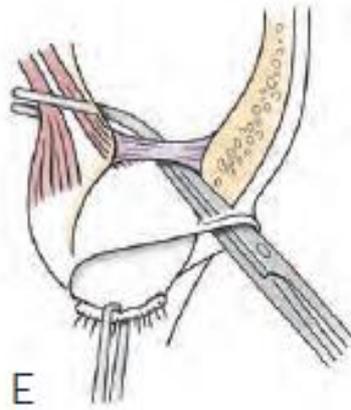
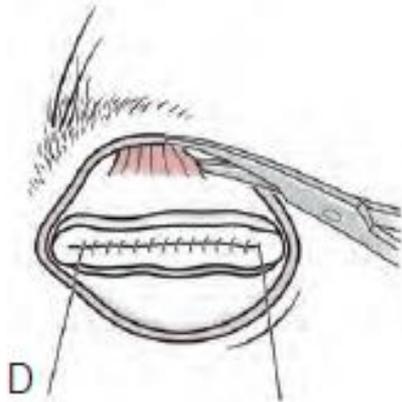
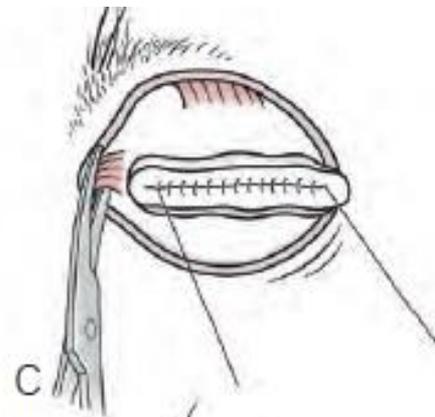
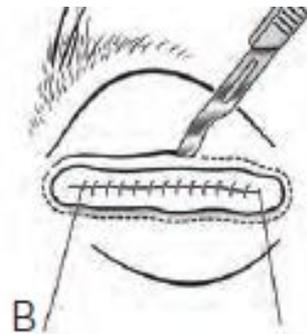
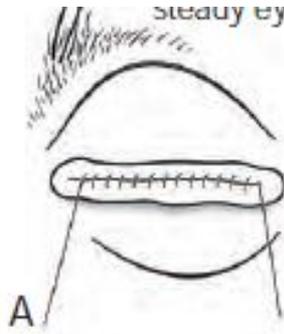
## *Surgical procedure*

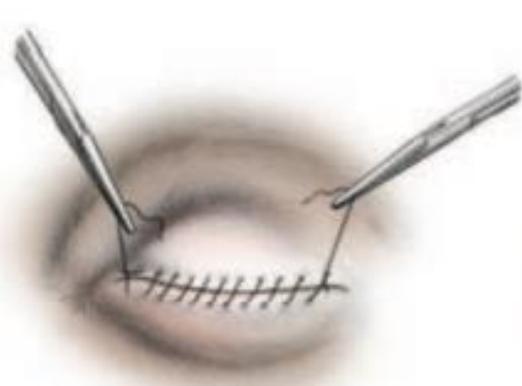
- *Clip the area and prepare it for aseptic surgery.*
- *Start with closure of the eyelids. Suture the lids closed with a simple continuous suture with the ends left long, or clamp closed the eyelids with Allis tissue forceps, which may be used for traction*
- *Incise the skin in a wider circumference*
- *Dissect into deeper tissues using blunt dissection.*
- *Identify the lateral and medial canthal tendons, and sharply incise them*

- *Dissect into deeper tissues using blunt dissection.*
- *Identify the lateral and medial canthal tendons, and sharply incise them.*
- *Identify the extraocular muscles and incise them close to their attachments to the orbit.*
- *Use electrocautery and/or ligate large vessels as needed to control hemostasis.*
- *Excise the orbital lacrimal gland from under the lateral orbital ligament.*
- *Continue blunt dissection to the apex of the orbit; ideally then clamp it with curved hemostats before sharply excising it with scissors.*

- *ligate the clamped tissues before incising them.*
- *Flush the orbit with sterile saline.*
- *Close the orbit, taking care to close the wound without tension.*
- *If the surgical defect is too large to be closed routinely, consider using a reconstructive procedure such as a caudal auricular axial pattern flap to cover the surgical wound.*

steady eye only.





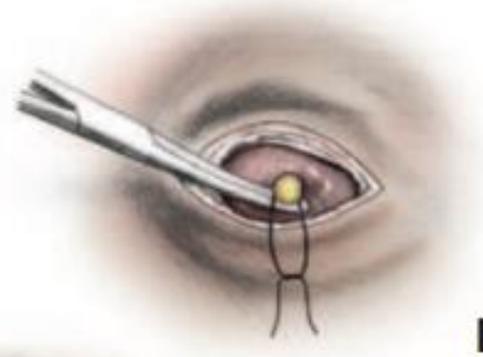
**A**



**B**



**C**



**D**



**E**

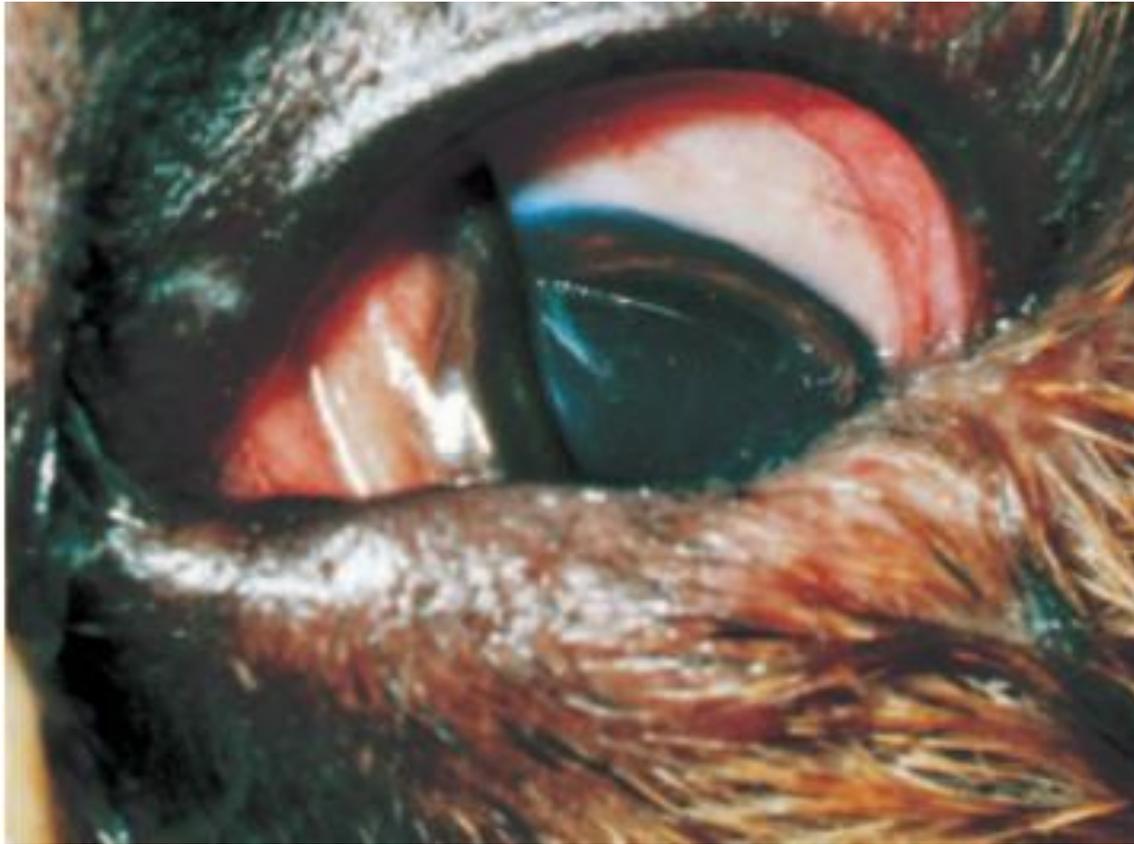
# **Complications**

**1. Sinusitis**

**2. Meningitis**

**3. Bleeding**

Entropion: inward rolling of the eyelid margin



# Surgical Treatment of Entropion (Hotz-Celsus procedure )

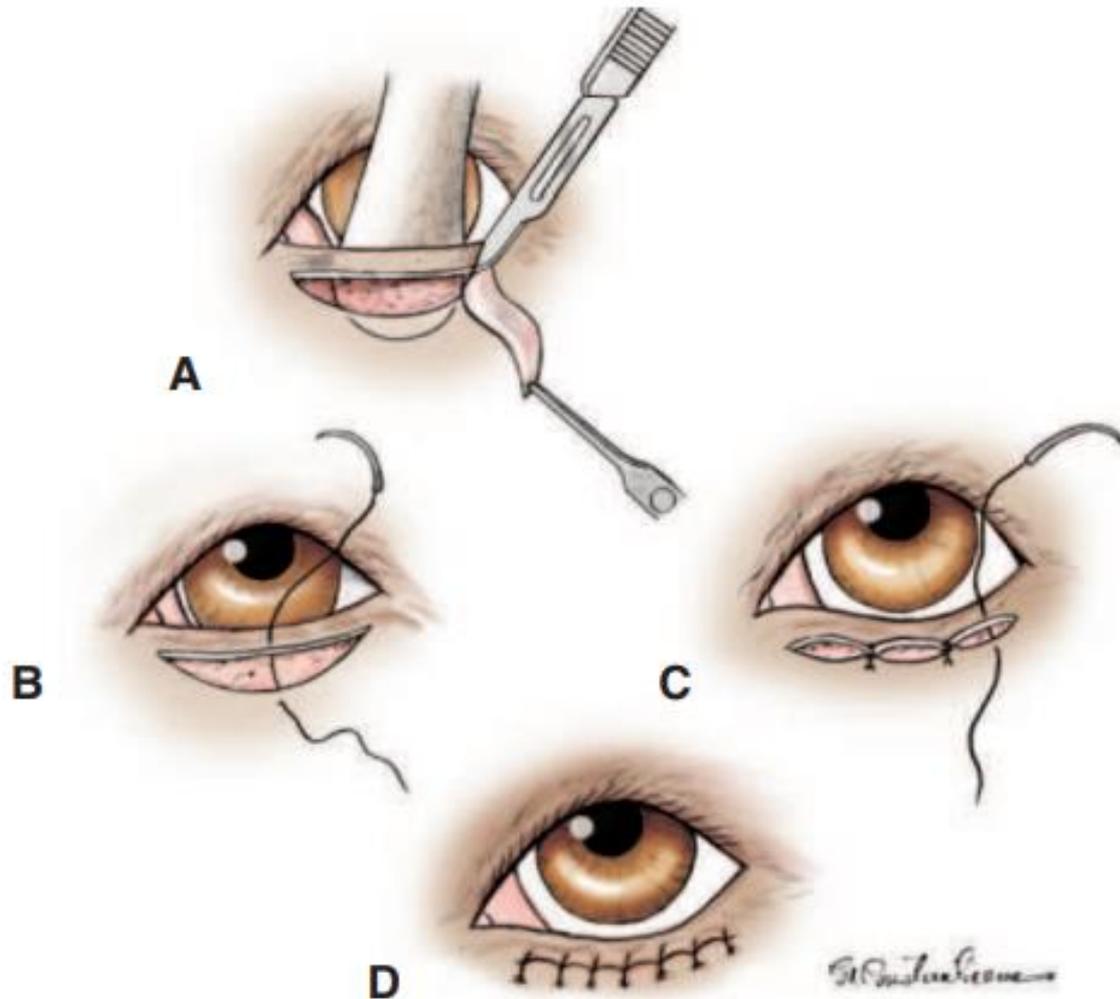
- 1- Jaeger lid plate is inserted into the conjunctival fornix to provide support for the incisions
- 2- The initial incision is made parallel to the eyelid margin at the haired-nonhaired border
- 3- A second incision is made that aris between the ends of the first incision, The width of the skin to be removed determines the extent of eversion
- 4- The defect is closed with a series of simple interrupted skin sutures, The first suture placed should be at the widest point of the resected tissue, Each of the following sutures is then placed so as to bisect the space remaining.

5- Use fine suture material (4/0 or smaller in dogs and cats).

6- Use fine, swaged-on, cutting suture needles.

8. Place multiple, closely spaced sutures.

# Hotz-Celsus procedure for correction of entropion



# Post operative



1- Topical antibiotic ointment

2- Elizabethan collar until 2 to 3 days after suture removal

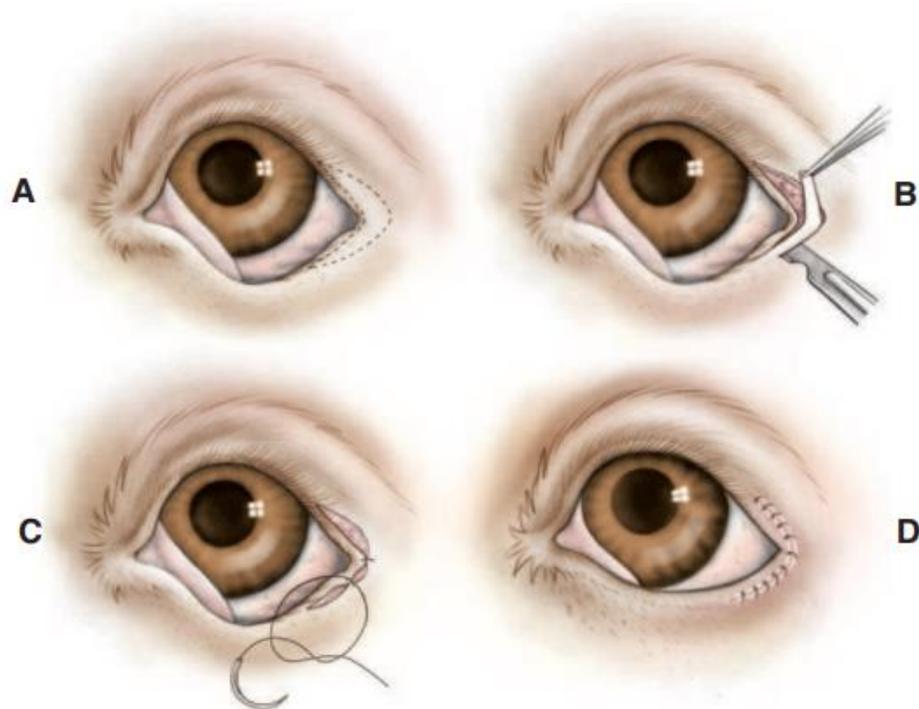
3- systemically NSAID for analgesia.

4- Sutures can be removed approximately 10 days postoperatively.

\* Systemic antibiotics are not necessary

# Complications

- 1- Undercorrection need for a second operation.
- 2- overcorrection, which causes ectropion.



**Figure 6-24.** Lateral arrowhead procedure for entropion of the lateral aspects of the upper and lower eyelids and the lateral canthus. This is

Ectropion: eversion of the eyelid, invariably affects the lower eyelid only

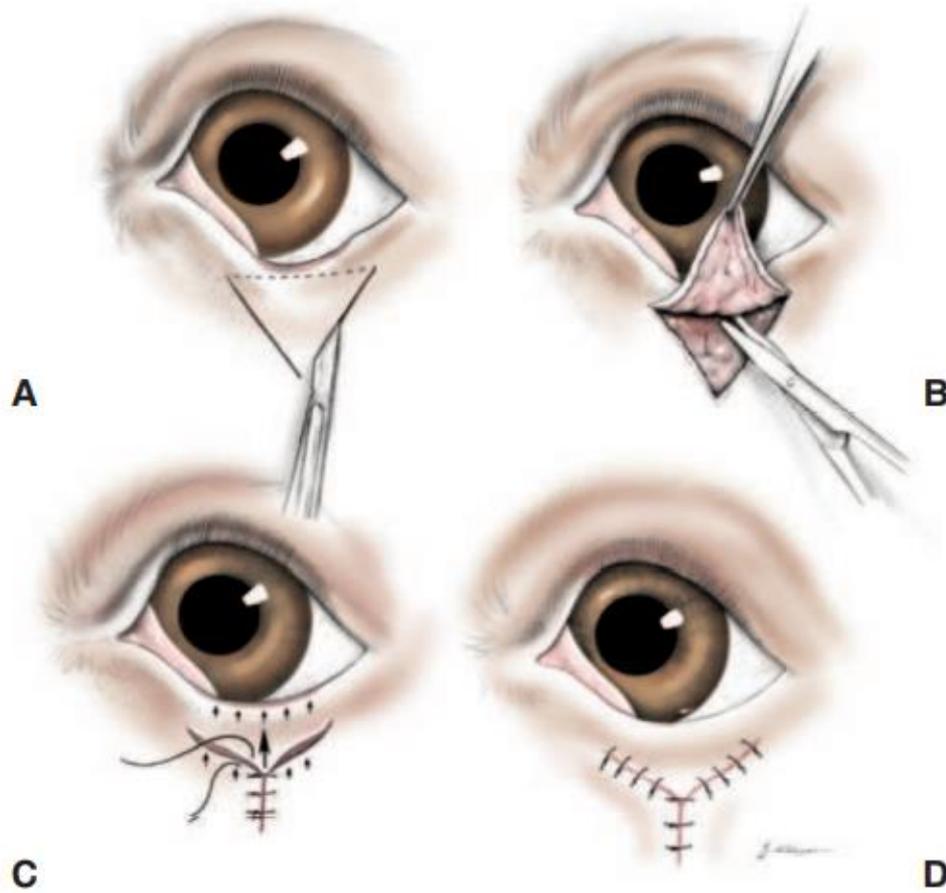


# Surgical Treatment of Ectropion

## V-to-Y blepharoplasty

- 1- A triangle of skin is outlined. The base and height are determined by the extent of ectropion
- 2- A scalpel is used to incise the skin along the two sides but not the base of the triangle
- 3 - The skin flap created is elevated and undermined
- 4 - The two sides of the triangle are sutured together to form the vertical portion of the Y
- 5- The length of the vertical portion of the wound is determined by the extent of eyelid eversion.
- 6 - The incisions are closed so as to form the two arms of the Y.

# V-to-Y blepharoplasty



# Post operative



1- Topical antibiotic ointment

2- Elizabethan collar until 2 to 3 days after suture removal

3- systemically NSAID for analgesia.

4- Sutures can be removed approximately 10 days postoperatively.

\* Systemic antibiotics are not necessary

# Complications

- 1- Undercorrection need for a second operation.
- 2- overcorrection, which causes entropion.

Thank you