# **Surgery of Eye**

#### **Ectropion**

Ectropion is eversion of the lower eyelid.

#### **GENERAL CONSIDERATIONS**

- Ectropion may be a developmental condition or may be acquired secondary to scar tissue formation or fatigue of the orbicularis oculi muscle.
- In some breeds, the eyelids and the palpebral fissure are excessive in size.
- In some large and giant breeds of dogs, the laxity of the lower eyelid may vary with health, hydration, and age.
- The drooping eyelid may allow tears to escape (epiphora) and expose the conjunctiva to drying and trauma.

### **Surgical Treatment.**

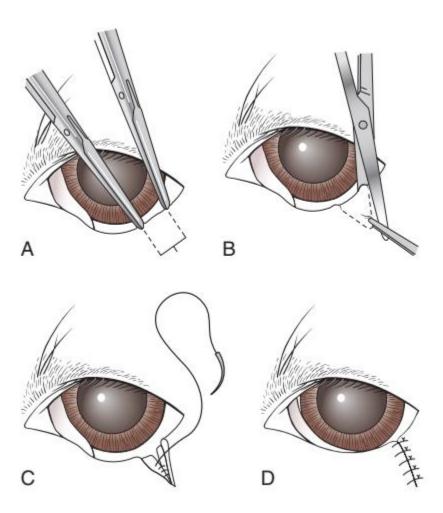
NOTE: Always estimate the amount of excess skin to be resected before administering preoperative sedation or anesthetics.

## **Wedge Resection**

Wedge resection is used for mild to severe cases of ectropion.

- 1- Resect a triangular full-thickness wedge of skin from the lateral aspect of the lower eyelid near the lateral canthus.
- 2- Mark the site of incision laterally by nicking or crushing, then manipulate the redundant lid laterally with thumb forceps to determine the amount of lid margin to be resected.
- 3- Make the sides of the excised triangle twice the length of the base of the triangle to facilitate apposition.
- 4- Excise this segment of skin as a triangle with its base at the lid margin.

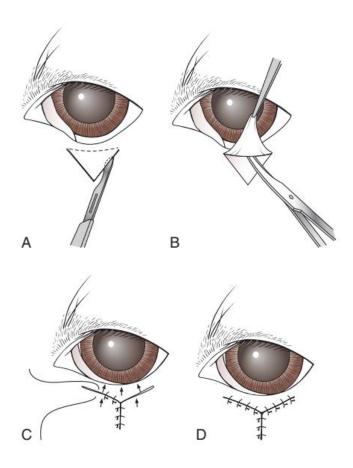
5- Align and accurately appose the eyelid margin with a simple interrupted or cruciate suture, then place additional skin sutures (4-0 to 5-0 absorbable Vicryl or nonabsorbable silk) while positioning and cutting suture ends so they do not rub on the cornea.



## **V-Y Correction Technique**

A V-Y correction is commonly used for cicatricial ectropion from wounds, tumor excision, or overcorrection of entropion when resection of a small wedge of tissue is insufficient. This procedure tightens but does not substantially shorten the eyelid margin.

- 1- Make a V-shaped incision distal to and slightly wider than the area of the ectropion.
- 2- Start the incision about 2 to 3 mm from the eyelid margin. Undermine the flap to near its base on the eyelid and remove any scar tissue.
- 3- Beginning at the most distal aspect of the V incision, begin placing sutures (4-0 to 5-0 absorbable Vicryl or nonabsorbable silk) from medial to lateral, creating the stem of the Y.
- 4- The length of the stem of the Y depends on how much elevation the lid margin requires to return it to a normal position (estimated as defect + 2 to 3 mm).
- 5- When the desired position of the lid has been obtained, appose the arms of the Y.



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# **Lateral Blepharoplasty**

Lateral blepharoplasty can be performed for animals with combined entropion-ectropion. This procedure combines the Hotz-Celsus technique for entropion with creation of a lateral ligament from the orbicularis oculi muscle.

- 1- Excise a pinch of redundant skin from both upper and lower eyelids, which meet at the lateral canthus.
- 2- Extend the incision laterally from the lateral canthus to the temporal bone. Dissect a corresponding strip of orbicularis oculi muscle from both upper and lower excision sites, which remain attached at the lateral canthus.
- 3- Using 4-0 absorbable suture material (e.g., polydioxanone), suture the ends of the muscle pedicles together and retract them laterally. Then tack the muscle pedicles to the periosteum over the temporal bone.
- 4- Place appositional sutures (4-0 to 5-0 absorbable Vicryl or nonabsorbable silk) to close the skin.

Complications: same as in entropion

