

Entropion

The eyelids consist of four parts: 1) the outer very thin and mobile skin; 2) the strong and encircling orbicularis oculi muscle anchored at the medial canthus; 3) the thin and poorly developed fibrous tarsus, which contains the sebaceous Meibomian glands and attaches the lid to the bony orbital rim; and 4) the thin and flexible palpebral conjunctiva, which continues to the conjunctival fornix or conjunctival cul-de-sac. Eyelid disorders may be associated with facial and orbital abnormalities, specific breeds, and adjunct skin diseases, as well as with many systemic diseases. Entropion is an inversion of all or part of the lid margins that may involve one or both eyelids and the canthi. Inversion of the cilia (or eyelashes) or facial hairs causes further discomfort, conjunctival and corneal irritation, and if protracted, corneal scarring, pigmentation, and possibly ulceration. Early spastic entropion may be reversed if the inciting cause is quickly removed or if pain is alleviated by everting the lid hairs away from the eye with mattress sutures in the lid, by subcutaneous injections (eg, of procaine penicillin) into the lid adjacent to the entropion, or by palpebral nerve blocks. Temporary stay sutures or surgical staples left in place for 2–3 wk may be used to treat entropion in very young puppies. Established entropion usually requires surgical correction. Entropion can be congenital, may be associated with dehydration, may occur secondary to microphthalmos or can develop at any age as a result of squinting from eye pain (spastic entropion) or secondary to eyelid scarring (cicatricial entropion). Entropion is a self-perpetuating and must be corrected for patient comfort and corneal/ocular health. Uncorrected entropion can lead to severe keratoconjunctivitis, corneal ulceration and scarring and possible corneal perforation. Entropion in some breeds and in some herds of sheep and goat may have an inherited predisposition and affected animals should be noted and culled. Clinical Signs of Entropion include :

- A. Epiphora
- B. Blepharospasm
- C. Corneal edema and ulceration in severe cases

General Considerations

- A. May be unilateral or bilateral.
- B. Some inherited tendencies but may also acquired.
- C. Seen in overweight adult potbellied pigs.
- D. Objective of surgery is to eliminate corneal trauma by rolling the bottom eyelid away from the cornea.

Anaesthesia

- A. None or a very small amount of lidocaine injected locally
- B. Older pot bellied pigs will likely require general anesthesia due to the extensive nature of the problem and the surgical repair.
- C. General Anaesthesia may be indicated depending on temperament of animal

Surgical Technique

Technique 1: Remove a semilunar piece of skin from under the affected eye. May be left open to heal or sutured or stapled.

Technique 2: Crush the skin under the affected eye with forceps.
No other treatment is necessary because this will correct the problem.

Technique 3: Inject 1 to 2 ml of solution subcutaneously under the affected eye. Saline or procaine penicillin G has been used successfully. This “filling” technique will often alleviate the problem. Iodine or other caustic material has been used but is not recommended.

Technique 4: Place staples, clips, or sutures in the skin under the affected eye to apply traction to a fold of loose skin, thus pulling the skin away from the eye.

Postoperative Care

- A. Typically, very little aftercare is necessary.
- B. Recheck the eye in 2 to 3 days to monitor improvement and recovery.

Video Resource

<https://www.youtube.com/watch?v=bmvoEAmicX8>