

Eye Affections

By

Prof. Ashraf Abu-Seida

Cairo University

2014

Ocular Dermoids

Definition:

- ▶ It is a congenital eye affection characterized by unusual presence of cutaneous tissue in the eye

Cause:

Congenital defect

Symptoms:

- ▶ Unilateral or bilateral outgrowths with hair clusters at the cornea, limbus, conjunctiva and/or eyelid
- ▶ Chronic epiphora
- ▶ keratoconjunctivitis

Ocular Dermoids

Treatment:

By superficial keratectomy and conjunctivectomy with a third eyelid flap

Ocular Dermoids



Cherry eye

Definition:

It is a pink mass protruding from the animal's eyelid due to prolapse of the gland of the third eyelid

Incidence:

It mainly occurs in dogs and cats specially young animals

N.B.: The NM contains many glands which merge as a single gland secreting tears for lubrication of the cornea

Cherry eye

Causes:

- ▶ The exact cause of cherry eye is not known
- ▶ Weakness of the connective tissue that attaches the gland to the surrounding structures of the eye.

Symptoms:

- ▶ oval mass protruding from the third eyelid .
- ▶ It can occur in one or both eyes
- ▶ The gland often becomes irritated, red, and swollen.
- ▶ Sometimes a mucous discharge
- ▶ Keratoconjunctivitis sicca and corneal ulcer may be developed.

Cherry eye

Treatment:

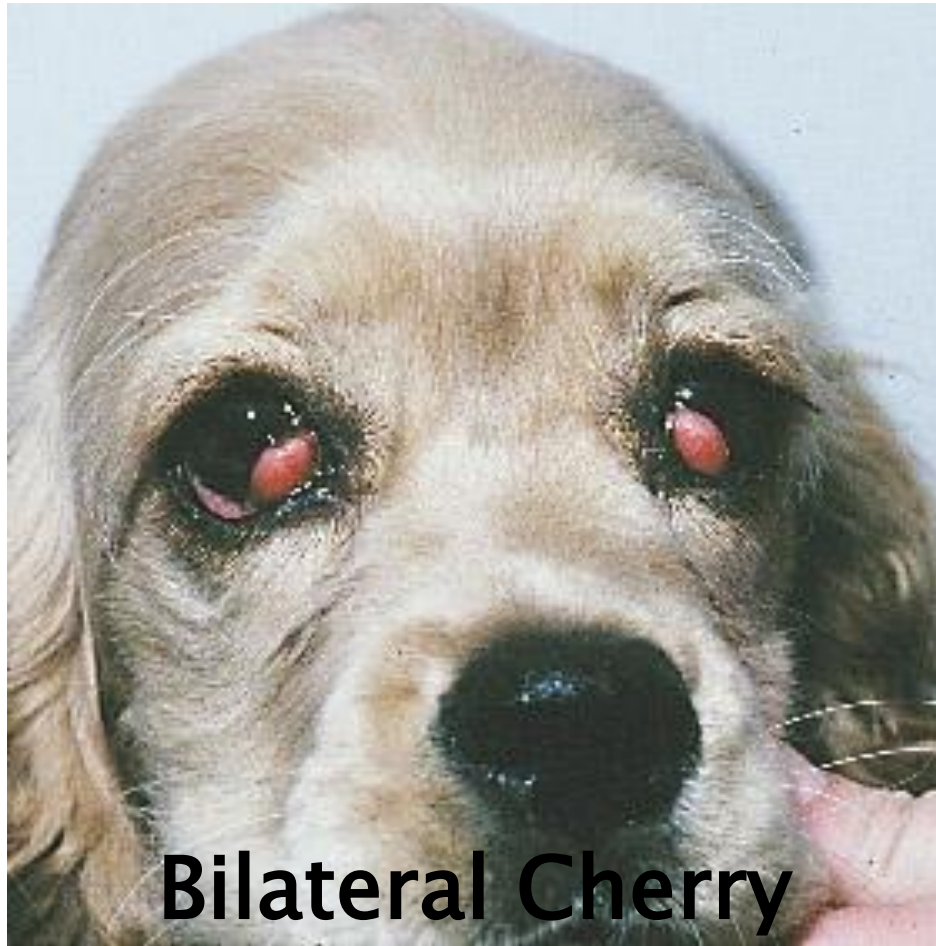
Non-surgical

- ▶ Downward diagonal-toward-snout closed-eye massage of the affected eye
- ▶ Occasionally self-corrects alone
- ▶ Antibiotics and steroids

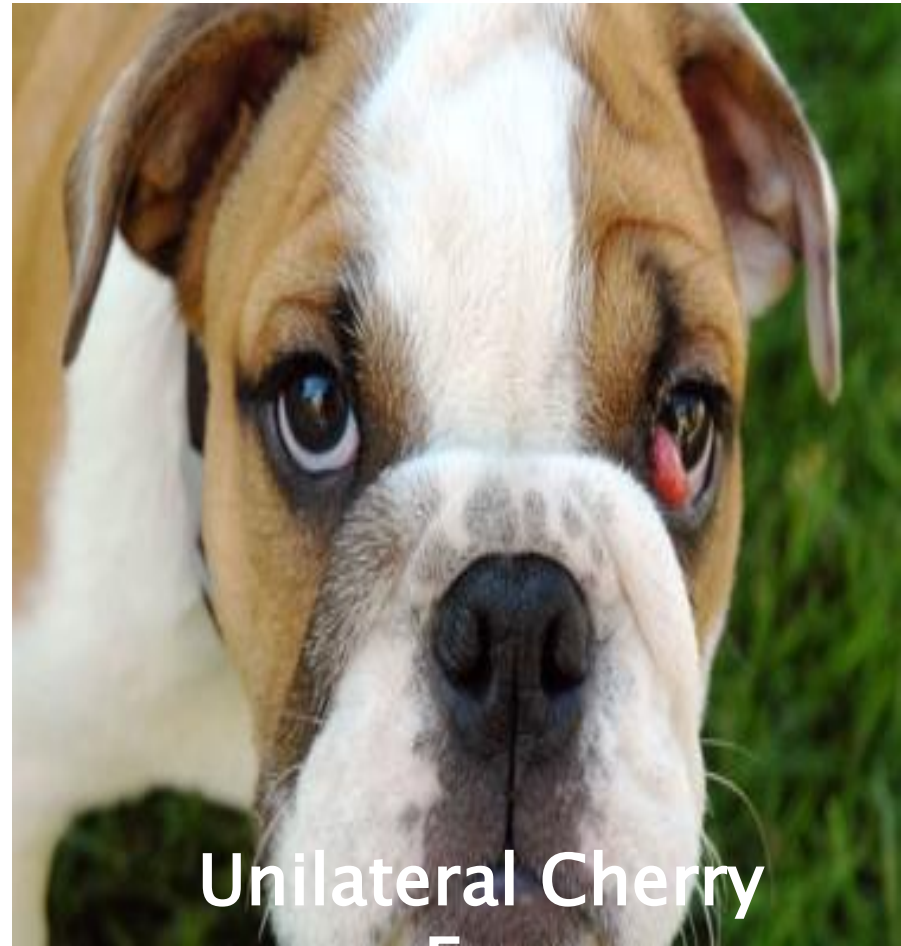
Surgical

▶ **Envelope/pocket method**

Suturing of tissue around the prolapse, encasing it in a layer of conjunctiva.



**Bilateral Cherry
Eyes**



**Unilateral Cherry
Eye**

Glaucoma

Definition:

- ▶ It is a serious eye disease characterized by increase in the intraocular pressure and it often leads to blindness.

Pathogenesis:

- ▶ There is a continuous exchange of fluid between the eye chambers and the systemic venous circulation. Ocular fluid is produced by the ciliary body and leaves the eye at the angle formed by the iris and the cornea. Glaucoma occurs when fluid in the eye is produced faster than it can be removed. This leads to an increase in intraocular pressure and degenerative changes to the optic nerve and the retina.

Glaucoma

Types:

Primary glaucoma

It is a hereditary disease that affects Beagles, Cocker Spaniels, Basset Hounds, Samoyeds, and other breeds.

Secondary glaucoma

It is a complication of another eye disease such as uveitis, displacement of the lens, or trauma to the eye.

Glaucoma

- ▶ **Acute glaucoma:**

It is highly painful, with tearing and squinting. The affected eye feels harder than the normal eye and has a fixed, blank look due to the hazy and steamy appearance of the cornea and enlarged pupil.

- ▶ **Chronic glaucoma**

It is associated with enlargement of the globe and protrusion of the eyeball. The eye may be tender to pressure and feel harder than the unaffected eye. In nearly all cases the affected eye is blind.

Glaucoma

Diagnosis

Case history

Clinical signs

Measurement of the intraocular pressure by Tonometer

Ultrasonographic examination

Glaucoma

Medicinal Treatment:

- * Intravenous mannitol. Mannitol increases serum osmotic pressure and draws fluid out of the anterior chamber into the circulatory system.
- * Oral carbonic anhydrase inhibitors that block the enzyme that produces the intraocular fluid (Oratrol tab).
- * Topical medications increase outflow of fluid by constricting the pupil. This widens the angle between the iris and the cornea (Pilocarpine eye drops).
- * Topical B-blocker as (Timolol eye drops)

Glaucoma

Surgical Treatment:

- ▶ cyclodestructive surgery by cryosurgery or Laser to destroy a portion of the ciliary body and consequently reduce the production of intraocular fluid.

 - ▶ Filtering surgery.
- 