

## EYE INJURIES

**Causes:** The eye suffers mainly from blunt or penetrating trauma ( cat fights ), and occasionally burns or scalds. The exophthalmic breeds such as Pokes are much more prone to eye damage, and their eyes often heal less well due to the thin tear film which struggles to flow over these bulging, exposed corneas. They also suffer from proptosed eyeballs, as their orbits are so shallow. Terrier breeds are predisposed to lens luxation - the internal ligaments holding the lens in place weaken with age, and the lens slips forwards through the iris. Although this can be presented as trauma, it is a true emergency, and so will need attention anyway. Eye injuries often need prompt treatment as the canine or feline eye is very prone to inflammation, which can destroy internal structures and so lead to blindness.

**Signs:** 1-Pain 2-Photophobia 3-Epiphora 4-Blepharospasm 5-Conjunctivitis (+/- discharge) Photophobia indicates pain on iris movement and so is a serious sign of deeper eye involvement. Other signs which may be noted on closer exam are:- corneal blueing and opacity due to oedema, scleral haemorrhage, cellular material in the anterior chamber (pus, blood).

**FIRST AID** 1-Irrigate 2-Cover 3-Attend to foreign body if safe to do so Irrigation will only be harmful if performed with the wrong solution, or if done under pressure on a perforated eye. It may be soothing even if not strictly necessary. Cover and pad well then bandage. Only pull out foreign bodies if easy and if clearly non-perforating. If in doubt, it is better that they be removed at surgery.

**IRRIGATE WITH:** (in descending order of preference) 1) Saline (0.9%) 2) Contact lens solution (£!) 3) Optrex, etc 4) Boric acid solution 5) Tap water 6) Liquid paraffin (Boric acid use 1teaspoonful per cup of water)

**Proptosis** The eye is expelled from the bony orbit. Traumatic proptosis is fairly common in brachycephalics due to their shallow orbit. Mesocephalics and doliocephalics tend to have fairly severe skull damage before expelling eyes, so:  
**BE CAREFUL WITH PROPTOSED EYES.**

**Treatment:** Wet dressing and cold compress to reduce swelling and maintain the viability of the cornea. It is not necessarily a good idea to try to replace the eye in long nosed breeds (there may be skull fractures ). Replacement without surgery (cutting at the corner of the eyelids to allow the eye back in) is usually only possible if done virtually straight away. After a couple of hours, recovery of the eye is unlikely.

**Penetration** There may or may not be a foreign body present, and the eye may or may not be collapsed.

**Treatment:** Most simply require covering / irrigating ( bearing in mind the importance of choice of fluid) and use of an Elizabethan collar to prevent self trauma. Surgery may be necessary.

**Blunt trauma** Usually causes haemorrhage into the sclera / conjunctiva, and into the anterior chamber if very severe. Always check for surrounding head trauma.

Treatment: These will usually clear very well by themselves over a few days, but photophobia may be present if the iris is torn. A cold compress may soothe.

Chemical Burns Cause immediate ulceration, and occasionally perforation.

Treatment: Require copious irrigation- several litres may be needed overall to ensure that any chemical has been cleaned from the cornea. Check for ulcers and in particular watch for a Descemetocoele - this indicates that the cornea is about to rupture.

Lens luxation Not a traumatic injury, but afflicts aged Terrier breeds particularly; the lens suddenly detaches and if it drifts forwards to rest against the cornea, it is an acute onset very painful eye disease, and may be mistaken for injury.

## **EAR INJURIES**

Causes: Ear injuries are seen commonly in cats (lacerations and fights) and in working and pendulous-eared dogs (haematomas, in which there is closed haemorrhage within the pinna.). Foreign bodies such as seeds are also seen in lop eared breeds more commonly than in prick eared dogs. Stings and bites also occur.

Treatment : Open haemorrhage in bites and lacerations- apply non-adherent compressive dressing. Blood is spread widely due to the animal shaking its head but haemorrhage is rarely serious. Closed haematomas are painful, and can be soothed with cold compressive dressings. This also helps to prevent further haemorrhage. Stings and insect bites or swelling due to plant exposure should also be treated by cold compress. If stings are visible, they should be removed as they may contain poison reservoirs. Foreign bodies are best left, unless very easy to remove, as the awns on seeds make them tricky to get out in one piece, unless the patient is under anaesthesia.