

CLINICAL EXAMINATION – OCULAR SURGERY

Physical examination:

- Sedate/anaesthetize the animal using appropriate anaesthetic technique.
- Properly restrain the animal.
- Clean the affected eye thoroughly to remove the exudates/dirt/dust etc.
- Do inspection in daylight to see any injury, discharge, abnormal movements of the eye.
- Do detailed examination in dark environment using ophthalmoscope
- **General examination:**
 1. Notice rubbing of eyes which depicts pain.
 2. If eyes are closed do examination under appropriate regional block.
 3. Do ‘blind test’ if required. See for movements of eyes in response to moving objects. Make the animal move using multiple obstacles in an area free from odor and noise.
 4. Check various eye reflexes like corneal, palpebral and nictitating.
 5. Check for swelling, foreign bodies, ocular growths, abnormal discharge. For example swelling in blepharitis, chemosis, abscess, tumor etc.
 6. Examine cornea and outer segments using light source. Oblique illumination helps to see embedded foreign body in cornea, corneal oedema and anterior synechia. Slit lamp illumination allows better visualization of outer part of eye.
 1. **Tonometry:** Intraocular pressure can be measured with the help of Schiottz’s tonometer.
 2. **Ophthalmoscopy:** It is used to examine fundic lesions, injuries, growths etc. Most suited to examine the retina and vitreous body through pupil.
 3. **Test for blindness.**
 4. **Schirmer tear test.**

Laboratory examination:

- **Bacteriological examination:** Helps in microbial culture and sensitivity test.
 1. Direct swabbing from conjunctival sac.
 2. Scrapings from conjunctiva, cornea and eyelid margins.
- **Corneal staining:** Used to ascertain the extent and depth of the corneal ulcers.
 1. Install 1-2 drops of ‘Flourescein dye’ in the conjunctival sac.
 2. Immediately add 1-2 drops of sterile water.

3. Ulcerated or irregular surface of the cornea takes ‘**green**’ color.
4. Rose Bengal or mercurochrome dyes can also be used.
- **Lacrimal drainage test:** Used to check the patency of excretory part of the lacrimal apparatus.
 1. Introduce blunt lacrimal cannula in the dorsal or ventral lacrimal punctum.
 2. Flush with NSS.
 3. See for the solution through other punctum or at the nostrils.
 4. Alternatively install few props of Flourescein dye in the conjunctival sac.
 5. The dye appears at the nostrils within 30 sec if patency is there. Any delay means some interruption. No dye is seen when complete blockade.
- **Radiographic examination:**
 1. Done to see orbital fracture, tumor or any foreign body. Dacrocystography is indicated to diagnose the abnormalities of the lacrimal drainage apparatus.