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| **Subconjunctival Injection** | |
| **Uses** | * Subconjunctival injections are another means of achieving high therapeutic levels of drugs in the cornea, sclera and anterior segment of the orbit. This is particularly important in the emergency management of acute infection or inflammation of the orbit. * Placing injections subconjunctivally bypasses the lipid layers of the bulbar conjunctiva and places the drugs adjacent to the water-permeable sclera, increasing water-soluble drug penetration into the eye. * Local deposition allows for the leakage and therefore, corneal penetration. |
| **Restraint** | Generally carried out in the standing animal  Standard restraint in a crush  A halter is used to restrain the animals head |
| **Materials Required** | 25 gauge 1 inch needle  1ml syringe  Drug being used to treat the ocular condition |
| **Procedure** | 1. Spray the cornea with topical anesthetic 2. Retract the upper and lower eye lids with your non-dominant hand or have an assistant to do so. 3. Rest your dominant hand with the syringe and medication in on the side of the animal’s head or just below the eye. This aids in stabilizing the hand when administering the medication. 4. The needle (with syringe containing the medication is attached) is inserted bevel upwards through the dorsal bulbar conjunctiva. 5. The syringe content is then slowly deposited. A subconjunctival bleb will appear at the site of injection. 0.5ml to 1ml at the site of injection only. 6. Gently remove the needle from the subconjunctival bleb. |
| **Advantages** | * Markedly increased penetration of water soluble drugs * Short term high concentrations of drugs in cornea and anterior segment * Supplement to topical therapy |
| **Disadvantages** | * Local irritation, residues, necrosis and granuloma formation can occur at the site of injection * Once injected the drug cannot be removed * Temporary pain at site of injection * Injection is quite difficult with potential for injury to eye |
| **Potential Complications** | * Granuloma formation * If the animal is not adequately restrained, there is a risk of accidental needle stick injury to the cornea/sclera/orbit * If inappropriate drugs are injected into the subconjunctiva, this could lead to discomfort for the animal (blephrospasm, epiphora and narrowing of the palpebral fissure) |