PRE-OP- Eyelid Laceration Repair

History and Signalment is important to know the diet and medications or problems that the animal is facing. TPR, CRT and rumen contractions can be checked to get an initial overview of the animal’s health.

Restraint

Physical- The animal should be properly restraint using a chute, squeeze cage, nose-tong or halter.

Chemical restraints used are: xylazine 0.05-1.0mg/kg (10% of recommended equine dose).

Ketamine and xylazine stun could be used: Ketamine, 1mg/kg

Xylazine- 0.05mg/kg

Surgical Preparation-

* The down eye should be elevated with a bean bag or towel
* The eye should be protected from the preparation solutions with a gauze or towel. The eye is lubricated with ointment.
* The hair is clipped around the margins of the lid and the lashes trimmed with a scissors.
* The loose hairs are blotted or vacuumed.
* Preparation solutions that are used: Diluted Povidone Iodine Solution, chlorhexidine is not used to prep the eye, as it is toxic to the eye.
* Clean periocular skin gauze-soaked sponges of dilute povidone iodine and alternate with sterile saline
* Clean the conjunctival sac with sterile cotton tipped applicators
* alternate iodine with saline and work out to the eyelid margins
* Final prep of periocular skin from margins outward. Keep surgery eye lubricated with sterile saline or methylcellulose gel to prevent corneal drying

Drugs and calculations:

Assuming cattle is 500kg

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| Drug name | Drug class | Dosage | Volume used |
| Lidocaine | Local anaesthesia | 2% lidocaine  Toxic dose-10mg/kg  5mg/kg- recommended dose | * Ring Nerve Block: 5- 10 ml subcutaneously 2.5 mm away from eyelid * 4 Point Nerve Block: 5-10 ml at each site. * Peterson Block: 5-10 ml at each site. * Retrobulbar Nerve Block: 20 ml at * Auriculopalpebral Block: 3-5 ml at site. (used to examine the eye) |
| Ketamine and Xylazine Stun | Sedation/ IM | Ketamine- 1mg/kg  10% concentration  Xylazine- 0.05  Concentration- 2% | ketamine- 5mls  xylazine-1.25mls |
| Flunixin | Analgesia  IV- slowly | 1.1mg/kg IV once daily to 5 days  Concentration- 50mg/kg | 3.3mls |
| Penstrep | Antibiotics | Dose: 1ml per 20 kg in cattle  Dose: 20,000 IU Conc: 200000 IU | 25mls |
| Tetanus toxoid and antitoxin | Prophylactic drug |  | 1 ml IM |
| Ivermectin | Antiparasitic - SC | 0.2mg/kg  Concentration- 1% | 10mls |

Calculations eg:

Lidocaine- 2%

Weight of animal 500 kg

Toxic dose- 10mg/kg recommended dose- 5mg/kg

Volume= Dose\*weight/ concentration= 5\*500/20= 125mls.