**WEIGHT OF SHEEP: 29 Kg**

**To calculate volume of drug (dose x weight)/concentration of drug**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Drug | Dose | Concentration | Volume | Withdrawal |
| Ketamine (IM) | 0.5mg/kg | 10% | 0.15ml | 3 days |
| Xylazine (IM) | 0.05mg/kg | 2% | 0.07ml | 14 days  |

**Ketamine Stun**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Drug | Dose | Concentration | Volume | Withdrawal |
| Flunixin (Banamine) (Slow IV injection) | 2.2mg/kg | 5% | 1.3ml | 4 days  |

**Analgesia**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Drug | Use | Dose | Concentration | Volume | Withdrawal  |
| Atropine | To treat xylazine induced bradycardia  | 0.04mg/kg | 5% | 0.02ml | 28 days UK |
| Tolazoline | To reverse xylazine | 2x xylazine dosage (0.1mg/kg) | 1% | 0.29ml | 10 days  |
| Epinephrine | To treat anaphylaxis | 1ml/kg | 5% | 0.58ml | 0 days  |

**Reversal Drugs**

**Prophylaxis**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Drug | Dose | Concentration | Volume | Withdrawal  |
| Long acting Penicillin Streptomycin (IM) | 40,000 IU/kg | 200,000 IU/ml | 5.8mls | 30 days  |
| Tetanus antitoxin  | 300IU/kg |  | 1ml |  |

**Local Anesthetic**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Drug | ½ Toxic Dose | Concentration | Volume | Withdrawal  |
| Lidocaine  | 5ml/kg | 2% | 7.25ml | 1 day |

**Epidural**

|  |  |  |  |
| --- | --- | --- | --- |
| Drug | Dose | Concentration | Volume |
|  | 0.25mg/kg | 5mg/ml | 1.45ml |
| Ketamine | 1.25mg/kg | 100mg/ml | 0.36ml |

# CONSTANT RATE INFUSION

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| DRUG  | Concentration mg/ml | Dose Ratemg/kg/hr | Calculations$M=\frac{DV}{IR}$ & V=$\frac{M}{C}$ | Withdrawal Time |
| Xylazine | 20 | .05 | $\frac{0.05x1000}{5}$=$\frac{10}{20}$= **0.5mls** | 14days |
| Ketamine | 100 | 5 | $\frac{5x1000}{5}$=$\frac{1000}{100}$=**10mls** | 3 days |
| Lidocaine | 20 | 1 | $\frac{1x1000}{5}$=$\frac{200}{20}$= **10mls** | 1 day |

# Drugs

1. **Penicillin streptomycin**: is a combination of antimicrobials for injections containing procine penicillin and dihydrostreptomycin sulphate and it is used to treat systemic infections in cattle.
2. **Flunixin**: is a potent, non-narcotic, non-steroidal analgesic agent with anti-inflammatory and anti-pyretic activity