**DRUGS USED AND CALCULATIONS PERFORMED:**

**ANTI-MICROBIAL:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DRUG | CONCENTRATION | DOSAGE | CALCULATION | WITHDRAWAL | INDICATIONS FOR USE |
| PenStrep (Antibiotic) | 200 000 IU/ml | 40 000 IU/kg | (40 000 X 30.4)//200 000  =6.08 ml | 30 days | Antibiotics |

**TETANUS:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DRUG | CONCENTRATION | DOSAGE | CALCULATION | WITHDRAWAL | INDICATIONS FOR USE |
| Tetanus | 500 IU |  | 1.5 ml  (as advised as the standard dose) |  |  |

**EMERGENCY DRUGS:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DRUG | CONCENTRATION | DOSAGE | CALCULATION | WITHDRAWAL | INDICATIONS FOR USE |
| Tolazoline | 100 mg/ml | 0.2 mg/kg | (0.2 x 30.4) / 100  =0.06 ml |  | Xylazine reversal |
| Atropine | 0.54 mg/ml | 0.04 mg/kg | (0.04 x 30.4) / 0.54  =2.25 ml | 14 days for meat  3 days for milk | Bradycardia reversal |
| Epinephrine | 1 mg/ml | 0.02 mg/kg | (0.02 x 30.4) / 1  =0.6 ml |  | Anaphylactic reaction |

**PRE MEDICATION DRUG:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DRUG | CONCENTRATION | DOSAGE | CALCULATION | WITHDRAWAL | INDICATIONS FOR USE |
| Xylazine | 20 mg/ml | 0.05 mg/kg | (0.05 X 30.4)/20  =0.08 ml  Made up to 1 ml by adding 0.92 ml of saline | 14 days for meat  48 hours for milk | Anaesthesia |

**INDUCTION DRUGS:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DRUG | CONCENTRATION | DOSAGE | CALCULATION | WITHDRAWAL | INDICATIONS FOR USE |
| Ketamine | 100 mg/ml | 6 mg/kg | (6 x 30.4) / 100  =1.82 ml IV | 3 days for meat  24 hours for milk | Anaesthesia |
| Lidocaine | 20 mg/ml | 1 mg/kg | (1 x 30.4) / 20  =1.5 ml | 1 day for meat  24 hours for milk | Toxic dose:  10 mg/kg |

**EPIDURAL (L6-S1) DRUG:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DRUG | CONCENTRATION | DOSAGE | CALCULATION | WITHDRAWAL | INDICATIONS FOR USE |
| Lidocaine | 20 mg/ml |  | 5 ml  (as advised as a standard dose) | 1 day for meat  24 hours for milk | Toxic dose:  10 mg/kg |

**CONSTANT RATE INFUSION DRUGS:**

FORMULA:

M = DWV / 16.67 R

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DRUG | CONCENTRATION | DOSAGE | CALCULATION | WITHDRAWAL | INDICATIONS FOR USE |
| Xylazine | 20 mg/ml | 0.66 mcg/kg/min | (0.66 x 30.4 x 1000) / (16.67 x 152)  =7.9 mg (/20)  =0.4 ml | 14 days for meat  48 hours for milk | Anaesthesia |
| Ketamine | 100 mg/ml | 66 mcg/kg/min | (66 x 30.4 x 1000) / (16.67 x 152)  =790 mg (/100)  =8 ml | 3 days for meat  24 hours for milk | Continuous analgesia |
| Lidocaine | 20 mg/ml | 20 mcg/kg/min | (20 x 30.4 x 1000) / (16.67 x 152)  =240 mg (/20)  =12 ml | 1 day for meat  24 hours for milk |  |

INTRA-OP FLUID : 0.9% Saline

BAG: 1 L

CALCULATION FOR DRIP RATE IN DROPS PER SECOND: (ml/min x drip factor) / 60 = drops/sec

(152 x 20) / (3600) = 0.84

= 1 drop per second

**PAIN MANAGEMENT DRUG:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DRUG | CONCENTRATION | DOSAGE | CALCULATION | WITHDRAWAL | INDICATIONS FOR USE |
| Flunixin Meglumine | 50 mg/ml | 2.2 mg/kg | (2.2 x 30.4) / 50  =1.4 ml | 4 days for meat | Pain relief; use for 3 days consecutively post-op |