**Pre-Anaesthetic Induction**

1)Bomazine® 2% (Xylazine HCl)

Conc =20mg/ml

Dose= 0.025mg/kg

Dosage = (4.5kg x 0.025 mg/kg )/20 mg/ml

 =0.005625ml

Correct Use: 0.01ml diluted with saline to 0.5ml in syringe.

Give each kid 0.25ml of the solution.

Thus dosage of 0.005ml would have been administered.

Complication:

0.1ml was accidentally diluted to 0.5ml in syringe with saline instead of 0.01ml

Reversal with Tolazoline was done.

**Anaesthetic Induction**

1) Ketamin®:Valium® in 1:1 mixture of 0.5ml.

0.25ml Ketamine was mixed with 0.25ml Diazepam

2)Lidocaina® (Lidocaine HCl)

Conc = 20mg/ml

Dose = 1.0mg/kg

Dosage= (4.5kg x 1mg/kg)/ 20mg/ml

 = 0.025ml

Toxic dose = 10mg/kg

Vol = (4.5 x 10mg/kg)/ 20mg/ml

 =2.25ml

“Top up” vol:

 ½ induction drug volume given

* 0.25ml Ketamine®/Valium® solution
* 0.1125ml Lidocaina®

These were used in the case that the level of anaesthesia became too light.

Splash blocks with a solution made of a 1ml Lidocaine diluted to 10ml with saline was also used for regional analgesia when response to pain was present.

**Analgesia**

1) Banamine® (Flunixin meglumine)

Conc: 50mg/ml

Dose : 2.2mg/kg

Dosage= (2.2mg/kg x4.5kg)/ 50mg/ml

 =0.198ml ≈ 0.2ml

**Maintenance (CRI)**

Drip Rate

Rate of fluid delivery= 5ml/kg/hr

Drop factor= 20drops/ml

Drip rate = (4.5kg x 5ml x 20drops/ml)/60 = 450 drops /min

 450/60 = 0.125drops/sec

 =1drop/ 8 seconds



1)Ketamin® (Ketamine HCl)

Conc= 100 mg/ml

Dose rate = 66mcg/kg/min

M= (66 mcg/kg/min x 4.5kg x 1000L) / (16.67 x (4.5kg x 5))

 =791.842ml

791.842ml /100

 = 7.9 ml ≈ 8ml

2)Lidocaina® (Lidocaine HCl)

Conc= 20mg/ml

Dose rate= 5mcg/kg/min

M= (20mcg/kg/min x 4.5kg x 1000L) / (16.67 x 22.5mg)

 = 240ml

240ml/ 20mg/ml = 12ml

3)Bomazine® (Xylazine HCl)

Conc = 20mg/ml

Dose rate = 0.66mcg/kg/min

M= (0.66mcg/kg/min x 4.5kg x 1000L) / (16.67 x 22.5mg)

 = 7.91842ml

7.91842ml / 20mg/ml = 0.39ml ≈ 0.4ml

Total amount of drugs to be added to saline bag = 8ml Ketamine + 12ml Lidocaine +0.4ml Xylazine = 20.4 ml

Therefore 20.4ml saline must first be removed from the sterile saline bag before administering 20.4ml of drugs.

|  |  |  |
| --- | --- | --- |
| Drug | Dose(μg/kg/min) | Vol to be injected (ml) |
| Ketamine | 66 | 8 |
| Xylazine | 0.66 | 0.4 |
| lidocaine | 20 | 12 |
| Total volume | 20.4 |

**Emergency drug**

Tolazoline® (Tolazolnie HCl)

Conc = 100mg/ml

Dose = 0.1mg/kg

Dosage = (4.5kg x 0.1mg/kg)/ 100mg/ml

 = 0.0045ml

**Antiobiotic**

Combi-kel 40®

Conc : 200 000IU/ml

Dose : 40 000IU/kg

Dosage = (4.5kg x 40 000IU/kg)/ 200 000IU/ml

 = 0.9ml

Adult with weight 20kg

 Dosage = ( 20kg x 40 000IU/kg) / 200 000IU/ml

 = 4ml