**DRUGS**

1. Antibiotic Prophylactic drug

Penicillin/Strep (200,000 IU/ml) @ D= 22,000 IU/kg

C=200,000 IU/ml; D= 22,000 IU/kg; W= 10 kg; V= (D xW)/ C => (22,000 x 10)/200,000 = 1.1 ml

1. Sedation drug

Azaperone ( 40 mg/ml) @ dose = 1mg/kg

C=40mg/ml; D=1mg/kg; W=10 kg; V=(D x W)/C => V = (1 x 10)/40 = 0.25 mls

1. Pain management drug

Flunixin meglumine ( 50 mg/ml) @ dose = 1.1 mg/kg

C = 50mg/ml; D=1.1 mg/kg, w= 10kg => V=(D xW)/C => (1.1x 10)/50 = 0.22 mls

1. Back up sedation drug

Xylazine : Ketamine in a ratio of 1:1

@ 1ml/45 kg; number of mls for 10 kgs = (10 x 0.022)/1 = 0.22 ml; ratio of Ketamine; xylazine is 1: 1 = 0.11ml of ketamine : 0.11mls of xylazine

1. Anaesthetic induction agent

Thiopental

C= 50mg/ml; D= 10mg/kg; W = 10 kg; V=(D x W)/C => V = ( 10 x 10)/ 50 = 2 mls of thiopental

1. Maintenance agent

1Ketamine : ¼ Valium @ 1 ml/20lbs/BW

20 lbs = 1ml => 22 lbs = 22x1/20 = 1.1 ml

Volume of ketamine : valium = 1.1 + 0.22 = 1.32 mls

1. Emergency drugs
* Atropine ( 0.54 mg/ml) @ dose = 0.05mg/kg

V = (0.05 x 10)/ 0.54 = 0.925 mls

* Epinephrine ( 1mg/ml) @ Dose = 0.2 mg/kg

V = (0.2 x 10)/1 = 2 mls

1. Drip rate = (Total volume/ time in secs) x drip factor

Total volume = 10 mg/kg/1 hr x 10 kg

Total time = 60 x 60 = 3600 secs

Drip factor = 20 drops / ml

Drip rate = (10 x 10)/ 3600 = 0.027 mls/sec =>0.027 x 20 = 0.55 drops /sec

0.55 drops/ sec => 1 drop = 1 x 1 / 0.2 = 2 secs => 1 drop/ 2 secs

1. Lidocaine splash

2 % lidocaine (20mg/ml)

Use a 10 ml syringe and 5-10 ml of 2 % lidocaine to splash the wound site during suturing. This enables the surgeon to close the wound with out topping up with ketamine: Valium