

Castration/Vasectomy/Epidural Lab

Drugs to be used:

Formula to be used:

(Weight x Dose)/Concentration

Weight= 120kg

Drug	Concentration	Dose rate	Calculation	Other
Epinephrine	1 mg/ml	0.02mg/kg	$(120 \times 0.02) / 1 = 2.4\text{ml}$	-Anaphylactic reactions -No withdrawal time needed
Atropine	0.54mg/ml	0.04mg/kg	$(120 \times 0.04) / 0.54 = 0.83 \text{ ml}$	-Use if bradycardia (< 30bpm) -Withdrawal time 14 days -meat 3 days-milk
Xylazine	20mg/ml	0.05 mg/kg	$(120 \times 0.05) / 20 = 0.3 \text{ ml}$	-Withdrawal time 14 days- meat 48hrs-milk -approx. 45min of anesthesia
Tolazoline	100mg/ml	2x xylazine dose = 0.05 x2= 0.1 mg/kg	$(120 \times 0.1) / 100 = 0.12\text{ml}$	-No withdrawal for food animals -xylazine reversal
Ketamine	100mg/ml	0.5mg/kg	$(120 \times 0.5) / 100 = 0.6\text{ml}$	-Withdrawal time 3days-meat 24hr-milk
Antibiotics (Penstrep)	200,000IU/ml	20,000 IU/kg	$(120 \times 20,000) / 200000 = 12\text{ml}$	Withdrawal time 30days
Flunixin	50mg/ml	2.2mg/kg	$(120 \times 2.2) / 50 = 5.28 \text{ ml}$	-Preemptive analgesia -used in post op for 3 days

				-NSAID
Lidocaine	20 mg/ml		5mls was used for each site	10mg/kg
Lidocaine (Epidural)	20mg/ml	0.2 mg/kg	2ml	10mg/kg
IV fluids 0.9% Saline	Rate of fluid delivery= 5ml/kg/hr Drop factor = 20 drops/ml Weight= 120kg Vol of fluid/hr= 120 x5= 600ml/hr Drops per min= (600 x20)/60= 200 drops Drops per second= 200/60= 3.33/ 3-4 drops			
Ivermectin	1% (10mg/ml)	0.2mg/kg	(120 x 0.2)/ 10= 2.4ml	Withdrawal Time -Meat- 35 days