MJF COLLEGE OF VETERINARY AND ANIMAL SCIENCE,CHOMU

PRE-SURGICAL CONSIDERATIONS

Dr. Meena Puniya
VSR

Pre Surgical Laboratory Test

At least Packed cell volume (PCV) and plasma protein (PP) concentrations should be evaluated

- **Hyper proteinemia can indicate haemo- concentration and dehydration**
- **Drug responses can be affected by hypoproteinemia**
- **It has been recommended that pre operative PCV be 27-30%**
- **intra operative and post operative PCV be kept above 20%.**

Selection of anesthetic agent:

Anaesthetic Risk

Potentiality to surviving anaesthesia and surgery

According to ASA physical status of animal classified into five classes (I to V)

- Patient is a completely healthy
- Patient has mild systemic disease
- Patient has severe systemic disease that is not incapacitating.
- Patient has incapacitating disease that is a constant threat to life.
- A moribund patient who is not expected to live 24 hour with or without surgery.

Pre-anaesthetic agent:

Agent who are usually given to prepare the patient for administration of anesthetic agent.

Uses

- **To reduce the amount of general anaesthetic**
- **To calm the patient so that anesthesia can be administrated without bright and struggling.**
- **To reduce gastric and intestinal motility and prevent vomiting while the patient is under anesthesia.**

Classification of pre anaesthetic agent :

(a) Anticholinergic agent

(b) Tranquilizers or neuroleptics.

(c) Sedative

(d) Opoid analgesic agent / Nacrotic.

Anticholinergic agent

Anticholinergic inhibit parasympathetic nerve impulses by selectivity blocking the binding of the neurotransmitter acetylcholine to its receptor in nerve cells.

Atropine Sulphate

Inhibits the muscarinic action of acetylcholine on structure inervated by post galglionic cholinergic nerve and on smooth muscle which respond to endogens, but not inverted

Effect of atropine sulphate

1. Cardiovascular system
2. Respiratory system
3. Other physiological function

Metabolism :

Dog excretes some part of atropine intact via kidney and remaining part undergoes hepatic metabolism.

Cat metabolizes the majority of the atropine in the liver

Doses:

Cattle = .04 to .06 mg/kg b.w. S/C or I/M Dog /Cat = .04 mg I/M or S/C Horse = .02 mg to .05 mg I/M or S/C Sheep/Goat = .7mg/kg B.W. I/M or S/C

Contraindication

Overdose