Patient evaluation and preparation

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Preanesthetic evaluation

All body systems should be examined and any abnormalities identified. The physical examination and medical history will determine the extent to which laboratory tests and special procedures are necessary. In all but extreme emergencies, packed cell volume and plasma protein concentration should be routinely determined.

Physical status

Physical status is determined by

(a) History, including an assessment of pain;

(b) Inspection (attitude, condition, conformation, temperament, stress, or distress);

(c) Palpation, percussion, and auscultation;

(d) Laboratory determinations and special procedures (e.g., radiographs). Any abnormalities should be noted.

Classification of physical status

Following examination, the physical status of the patient should be classified as to its general state of health according to the American Society of Anesthesiologists (ASA) classification:

Category	Physical status	Possible examples of this category
I	Normal healthy patients	No discernible disease; animals entered for ovariohysterectomy, ear trim, caudectomy, or castration
II	Patients with mild systemic disease	Skin tumor, fracture without shock, uncomplicated hernia, cryptorchidectomy, localized infection, or compensated cardiac disease
III	Patients with severe systemic disease	Fever, dehydration, anemia, cachexia, or moderate hypovolemia
IV	Patients with severe systemic disease that is a constant threat to life	Uremia, toxemia, severe dehydration and hypovolemia, anemia, cardiac decompensation, emaciation, or high fever
V	Moribund patients not expected to survive 1 day with or without operation	Extreme shock and dehydration, terminal malignancy or infection, or severe trauma

Additional evaluations

1. Complete blood counts;
2. Urinalysis; blood chemistries to identify the status of kidney and liver function, blood gases, and pH;
3. Electrocardiography;
4. Clotting time and platelet counts;
5. Fecal examinations;
6. Blood electrolyte determinations.
7. Radiographic and/or ultrasonographic examination may also be indicated.

Patient preparation

1. Preanesthetic fasting

With most types of general anesthesia, it is best to have patients off feed for 12 hours previously. Some species are adversely affected by fasting. Birds, neonates, and small mammals may become hypoglycemic within a few hours of starvation.

Induction of anesthesia in animals having a full stomach should be avoided, if at all possible, because of the hazards of aspiration pneumonia.

2. Preanesthetic fluid therapy

In most species, water is offered up to the time that preanesthetic agents are administered. Due to many older animals have clinical or subclinical renal compromise.

Dehydrated animals should be treated with fluids and appropriate alimentation prior to operation; fluid therapy should be continued as required. Anemia and hypovolemia, as determined clinically and hematologically, should be corrected by administration of whole blood or blood components and balanced electrolyte solutions. Patients in shock without blood loss or in a state of nutritional deficiency benefit by administration of plasma or plasma expanders.

Patient preparation

3. **Prophylactic antibiotic administration**
4. **Oxygenation and ventilation**
5. **Heart disease**
6. **Hepatorenal disease**
7. **Patient positioning**

During anesthesia, patients should, if possible, be restrained in a normal physiological position.

Preanesthetic drugs

- Preanesthetic medication or ‘premedication’ are the drugs, which are usually given to prepare the patient for administration of anesthetic agent.
- Premedication implies administration of sedatives, tranquilizers and analgesics

Preanasthestic purposes

1. Reducing the side effects of anesthesia.
2. Reduce the dose of anesthetic.
3. Provide muscle relaxant.
4. Reduces stress
5. Prevent or reduce pain during and after surgery

Premedication (Sedation)

Administration of drug before induction of anesthesia to prepare the patient which give :

- In combination with local anesthesia.
- As an adjunct to general anesthesia.

Such as (Anticholinergic drug, Benzodiazepines, Phenothiazine, Butyrophyenones and Alpha 2 Agonist)

Drug categories

- Anticholinergics drugs (Atropine sulphate, Hyoscine)
- Phenothiazines (Acepromazine)
- Butyrophenones (Butorphanol tartarte, Droperidol)
- Benzodiazepines (Diazepam, Midazolam)
- Alpha-2 agonist (Xylazine, Detomidine HCL)

Thanks