PREANESTHETIC EVALUATION
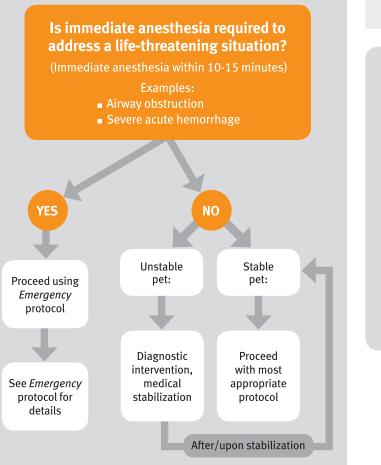
PROCEDURE

1. Review complete patient history
2. Perform complete physical examination
3. Evaluate preanesthetic clinical pathology data
4. Assign ASA status and communicate with owner as needed
5. Determine most appropriate anesthetic protocol based on patient evaluation
6. Assess and anticipate patient analgesic requirements
7. Assign/identify dedicated monitoring associate
8. Complete *Anesthesia Machine Checklist*
9. Administer premedication drugs
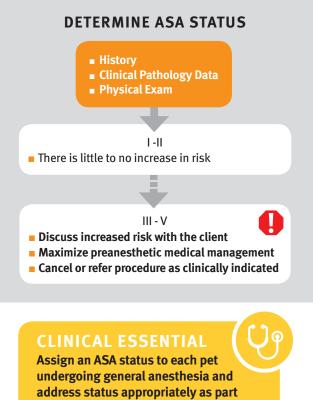10. Perform pre-induction physical examination and proceed to induction if clinically indicated

GENERAL ANESTHESIA: PATIENT STABILITY AND TIMING

Is immediate anesthesia required to address a life-threatening situation?

(Immediate anesthesia within 10-15 minutes)

Examples:
- Airway obstruction
- Severe acute hemorrhage

YES

Proceed using *Emergency* protocol

See *Emergency* protocol for details

NO

Unstable pet:

Stable pet:

Diagnostic intervention, medical stabilization

Proceed with most appropriate protocol

After/upon stabilization

CLINICAL ESSENTIAL

Address and resolve physical examination abnormalities that may negatively impact anesthesia (*e.g.,* dehydration, obesity) prior to anesthesia when possible, especially with elective procedures

Status	ASA Classification	Examples
I	Healthy pet, no disease	Elective OVH or castration
II	Mild systemic disease or localized disease	Healthy geriatric pet, mild anemia or obesity
III (fair)	Moderate systemic disease limiting activity but not life-threatening	Mitral valve insufficiency, collapsing trachea, poorly controlled diabetes
IV (poor)	Severe systemic disease; incapacitating; life-threatening; not expected to live without surgery	Hemoabdomen from splenic rupture, severe traumatic pneumothorax, organ failure
V (grave)	Moribund; not expected to live >24 hours, with or without surgery	Multi-organ failure, severe shock, terminal malignancy

DETERMINE ASA STATUS

- **History**
- **Clinical Pathology Data**
- **Physical Exam**

I -II
- There is little to no increase in risk

III - V
- **Discuss increased risk with the client**
- **Maximize preanesthetic medical management**
- **Cancel or refer procedure as clinically indicated**

CLINICAL ESSENTIAL

Assign an ASA status to each pet undergoing general anesthesia and address status appropriately as part of the preanesthetic evaluation

For additional information see the *Medical Quality Standards* chapter

PREANESTHETIC CLINICAL PATHOLOGY EVALUATION

STOP
› Perform further diagnostics to look for underlying causes
› Postpone elective procedures if possible

CRITICAL STOP
› DO NOT PROCEED WITH GENERAL ANESTHESIA
› Institute medical management of underlying disorder or consider referral

Parameter	Stop	Considerations	Critical Stop
Blood Glucose (BG) (mg/dL)	**Canine: >175 Feline: >250** OR **<70**	■ If high, recheck in a few hours 　● If non-elective proceed with most appropriate protocol ■ If low, recheck to ensure accuracy ■ If non-elective proceed with IV dextrose and recheck frequently	**<50** OR **>600**
Total Protein (TP) (g/dL)	**<4.5**	■ If nonelective procedure, provide colloid support	**<3**
Albumin (g/dL)	**<2**	■ If nonelective procedure, provide colloid support	**<1**
Calcium (Ca^{2+}) (mg/dL)	**<8** OR **>12**	■ Check albumin levels ■ If nonelective procedure, proceed with *Cardiac* protocol	**<7** OR **>16**
Sodium (Na$^+$) (mEq/L)	**<135** OR **>170**	■ Recheck to ensure accuracy, assess hydration and neurologic status	**<125** OR **>180**
Chloride (Cl$^-$) (mEq/L)	**<100** OR **>135**	■ If hyperchloridemic ensure pet is not receiving KBr	**<90** OR **>145**
Potassium (K$^+$) (mEq/L)	**<3.5** OR **>6**	■ Obtain ECG tracing ■ If nonelective procedure, provide appropriate fluid support and recheck K$^+$ before proceeding to anesthesia ■ If K$^+$ improves, proceed with appropriate protocol and recheck frequently	**<2.5** OR **>6**
Hematocrit % (HCT) Packed Cell Volume % (PCV)	**Canine: <25 or >55** OR **Feline: <20 or >45**	■ If nonelective procedure, provide transfusion support for anemia ■ Assess volume status for hemoconcentration	**Feline: <15 Canine: <20** OR **>60%**
Platelets (/ul)	**<200,000**	■ Confirm with peripheral blood smear and manual count ■ Confirm as above and perform appropriate diagnostic testing for thrombocytopenia	**<60,000**
White Blood Cells (WBC) (/ul) Neutrophils (/ul)	**WBC <4000 Neutrophils <2000** OR **WBC >30,000**	■ Confirm with blood smear and manual differential count ■ Perform additional diagnostics to assess ■ If nonelective procedure, use disease appropriate protocol	**WBC <2000** OR **Neutrophils <1000**
Blood Urea Nitrogen (BUN) (mg/dL)	**<normal range** OR **Canine: >27 Feline: >35**	■ Perform additional diagnostics to assess ■ Check urine specific gravity (USG)	N/A
Creatinine (mg/dL)	**<normal range** OR **Canine: >1.8 Feline: >2.2**	■ Perform additional diagnostics to assess ■ Check urine specific gravity (USG)	N/A
Alanine Aminotransferase (ALT) (U/L) Alkaline Phosphatase (ALP) (U/L)	**Canine: >2 x upper limit of normal range Feline: >normal range**	■ Postpone procedure if appropriate ■ Hepatic evaluation if medically indicated ■ If nonelective procedure, use *Abdominal/Hepatic* protocol	N/A
Bilirubin (mg/dL)	**>2.0**	■ Recheck to assess for iatrogenic hemolysis ■ Check PCV/HCT/blood smear/slide autoagglutination to evaluate for hemolysis ■ If nonelective procedure, use *Abdominal/Hepatic* protocol	N/A

CLINICAL ESSENTIAL
Obtain and review clinical pathology data prior to general anesthesia. Verify, document and address all clinically significant abnormalities prior to premedication, communicate to the team, and discuss with the client. Dismissal of abnormal results is not permitted.

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Content is derived from *Anesthesia and Analgesia for the Veterinary Practitioner: Canine and Feline*