## Distinguishing Anesthetic Fiction from Fact: A Discussion (Part 1)

## Lindsey Culp Snyder, DVM, MS, DACVA

## University of Wisconsin

## Madison, WI

- I. Certain dog breeds are more sensitive to anesthesia
  - a. Fact and fiction
    - i. Anesthesia is a risk for any dog, any breed
    - ii. Owner communication is extremely important
    - iii. Very few scientifically documented true breed sensitivities
      - 1. Greyhounds and thiobarbiturates
        - a) All sighthounds?
      - 2. Boxers and acepromazine
      - 3. Brachycephalic breeds
        - a) Not a true sensitivity
    - iv. Consider referral if anesthesia is a concern
- II. Geriatric animals should not undergo anesthesia
  - a. Fiction
  - b. Geriatric animals can be more profoundly affected by sedatives and general anesthetics due to decreased metabolism
  - c. Alter drug dosages wisely
  - d. Monitor wisely
  - e. The animal's quality of life should not be compromised by a fear of anesthetizing and older patient
- III. Preanesthetic medication complicates anesthesia and delays recovery
  - a. Fiction
  - b. Decreases stress on the patient
  - c. Safer handling for personnel
  - d. Smoother anesthetic plane
  - e. Lower the MAC of inhalants
  - f. Smoother recovery
- IV. Acepromazine is a dangerous drug
  - a. Fiction

i.

- b. Older literature cites doses that are 10-100 times the doses routinely used today
- c. Can still cause heavy sedation and hypotension
- d. Although it is safe, it should still be used judiciously
  - Avoid in patients with:
    - 1. Dehydration
    - 2. Blood loss (prior or anticipated)
    - 3. Shock
    - 4. Severe CV disease
    - 5. Hepatic failure
- V. Pulse oximetry is a good indicator of ventilation
  - a. Fiction
  - b. Non-invasive method for monitoring oxygen carried by Hb in blood
  - c. Estimate of arterial Hb saturation
  - d. Based on oxyhemoglobin dissociation curve
  - e. End-tidal CO2 should be used to monitor the adequacy of ventilation
- VI. Low doses of alpha-2 agonists have no effect on CV function
  - a. Fiction
  - b. Potent sedation
  - c. Cardiac output can decrease as much as 40%
  - d. Dose-dependent, but significant even at 1 mcg/kg
  - e. Most animals can tolerate this decrease
  - f. Choose patients wisely