"Pearls" of Veterinary Medicine

THE CAPSULE REPORT® FOR VETERINARIANS

Trusted By The Profession Since 1981

AT A GLANCE

Anesthesiology

Tips for safe and smooth anesthesia

The risk of an adverse event during anesthesia is 0.02-0.05% for humans, 0.05% for healthy dogs (ASA 1 and 2), 0.11% for healthy cats, and 0.73% for healthy rabbits. Cats have a higher risk due to factors like heart disease prevalence and intubation challenges. Anesthesia risks rise with higher ASA status: ASA 3 (patient with moderate systemic disease) or higher, for dogs it's 1.3%, cats 1.4% and rabbits, 7.37%. The absence of a pre-anesthetic physical exam increases the risk of death since changes in patient status may be missed. Also, older animals, dogs < 5 kg, obese cats, mask/chamber induction, IV fluid overload in cats and traumatic intubation in cats increases risk.

Checklists reduce fatal incidents by 50% (the author recommends a book by Atul Gawande); a British version of an anesthetic checklist can be found here.

Prior to the admittance, medications should be administered to reduce fear and anxiety in animals experiencing these behaviors. The **Chill Protocol** is one option: **gabapentin 20 mg/kg PO is given the night prior to and the morning of the visit. Melatonin** is given (0.5 mg PO for cat/small dog; 1 mg for medium dog and 5 mg for big dog (100 lb.)) and **oral transmucosal acepromazine** is given 30 min prior to leaving house (same dose as IM); **trazodone** can be substituted for the acepromazine.

Medications that should be given on the day of anesthesia include antibiotics, steroids, behavior-modifying and cardiac drugs whereas **antihypertensives should be stopped**. **Diabetic patients should receive ¼ to ½ of the normal insulin dose** and undergo blood glucose monitoring.

Pain assessment is crucial. If the patient is vocalizing and pain is suspected, treat with analgesia first. If the animal does not appear painful and **will settle** with human contact, **treat for anxiety** with trazodone, a ThunderShirt® and/or food puzzles.

If the animal will not settle with human contact, it is suffering from dysphoria; **treat mild dysphoria with a sedative** such as acepromazine (0.01-0.02 mg/kg IV) or dexmedetomidine (0.5-2 mcg/kg IV. If the dysphoria is severe, reverse the opioid with full reversal (naloxone 0.01 mg/kg IV or SQ) or partial reversal (butorphanol 0.1 mg/kg IV). **Prevent emergence dysphoria by administering oxygen for at least 5 minutes after stopping the inhalant anesthetic.** If very delirious, give a bolus of propofol, 0.5-1 mg/kg IV or dexmedetomidine 0.5 – 2 mcg/kg IV but dex may be less effective. The animal will typically recover without delirium after the small bolus of propofol.

Pain scales: Colorado State Acute Pain Scale – Feline and Canine; University of Glasgow Composite Pain Score, short form; UNESP-Botucatu MDCPS for Cats; or the Feline Grimace Scale.

Becca Reader, VMX 2024 ***Cap Rep 42(4):1***

Clinical Pathology

Best Practices for Biopsy Sampling

Cytology of masses of the oral cavity are typically non-diagnostic, so performing a sedated oral biopsy is recommended by this author. Be careful to avoid biopsying the lip as it is often needed for reconstruction. Biopsy sites can often be left unsutured, but may be closed with 4-0

The Capsule Report is published monthly for active people interested in current topics & trends in veterinary medicine.

PO Box 6518, Thousand Oaks, CA 91359
www.capsulereport.com 877-820-9299 editor@capsulereport.com