# FOCUS

# **Postoperative Analgesia for Eye Surgery**

With eye enucleation, it is critical to control postoperative pain in patients to prevent postoperative complications from face rubbing or self-mutilation. This study compared lidocaine-bupivacaine retrobulbar injections given before enucleation vs lidocaine-bupivacaine infused gelatin hemostatic sponges in the orbit after enucleation for management of postoperative pain. Premedication consisted of hydromorphone, midazolam, and glycopyrrolate. Postextubation pain scores, recorded intermittently for the first 24 hours, were compared with preoperative pain scores. Significant differences were noted with respect to comfort level, response to touch, heart rate, and pain score in individual dogs over time; however, there was no

significant difference between groups. One of 8 dogs in the absorbable gelatin hemostatic sponge group required rescue analgesia and none was required in the injection group (n = 11). There were no postoperative complications.

### Commentary

Perioperative analgesia's impact on patient well-being extends beyond the immediate perioperative period. Thus, appropriate pain management is a critical component of any anesthetic plan. This study's technique offers an easy-to-perform means of delivering local anesthetic to the orbit that would serve as a valuable tool for clinicians unfamiliar or uncomfortable with performing a retrobulbar block. The depot of local anesthetic in the orbit prevents the transmission and transduction of nociceptive input to the CNS. This, with opioid administration (and ideally an NSAID unless contraindicated), provides multimodal analgesia, allowing for the doses of the individual drugs to be reduced, decreasing the potential for any dosedependent adverse effects while providing more effective analgesia than any one drug alone.—Martin Kennedy, DVM

#### Source

Use of lidocaine-bupivacaine-infused absorbable gelatin hemostatic sponges versus lidocaine-bupivacaine retrobulbar injections for postoperative analgesia following eye enucleation in dogs. Ploog CL, Swinger RL, Spade J, et al. JAVMA 244:57-62, 2013.

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# How do feline diabetes diets work?

The goal of feline diabetes management is to match the release of glucose into the bloodstream with glucose uptake into cells. To facilitate glucose uptake, exogenous insulin may be needed.

The ideal feline diabetes diet may depend on the body condition of the cat, but generally will be high in protein and low in carbohydrates. These features help control the amount and rate of glucose released. Purina Veterinary Diets® DM Dietetic Management® Feline Formula was



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the first feline diabetes diet formulated with these properties in mind.

## Do diabetic cats need both insulin and a special diet?

For most newly diagnosed diabetic cats, exogenous insulin is needed, and a highprotein, low-carbohydrate diet appears to help with glucose control and to increase the likelihood for remission.<sup>14</sup> Since many diabetic cats still have the capacity to produce insulin, it is possible to achieve a state of remission in which the cat no longer requires insulin injections. Published studies have shown that 50 to 60 percent of newly diagnosed diabetic cats have the potential to achieve remission. •- Ongoing research from the University of Queensland and The Cat Clinic in Australia suggests that a high percentage of cats in remission continue to be glucose-intolerant; so these cats will likely benefit from ongoing dietary management with a high-protein, low-carbohydrate diet.

## Many diabetic cats are also obese. Can this complicate nutritional recommendations?

The key is determining a body condition score (BCS). If a cat has a BCS of 7 or less on the 9-point Nestlé Purina Body Condition System<sup>™</sup> chart, DM is an excellent choice. For a BCS higher than 7, consider Purina Veterinary Diets® OM Savory Selects<sup>™</sup> Overweight Management Feline Formula. It is low in calories and high in fiber for weight loss, while providing the high-protein, lowercarbohydrate benefits of a diabetic diet.

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