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Ventral Midline Gastropexy

Although studies have not found an association between duration of anesthesia and survival in dogs with gastric dilatation–volvulus (GDV), shorter anesthetic times are likely more desirable. For this reason, ventral midline gastropexy (VMG), in which the seromuscular layer of the ventral pyloric antrum is incorporated into the cranial part of the linea alba closure, may be preferred over other gastropexy techniques for its simplicity and speed. This retrospective study included 203 dogs that underwent VMG following a diagnosis of GDV. Owners completed a follow-up questionnaire, with the objective of evaluating recurrence rates and postoperative complications. At the time of questionnaire, owners reported a 93.6% success rate with 190/203 dogs experiencing no signs of gastric dilatation or GDV recurrence. For cases of reported recurrence for which adequate follow-up was available, 5/7 were resolved with gastric decompression via orogastric tube and lavage. Only 24/203 patients participated in follow-up imaging (ie, ultrasound, contrast radiography) to assess quality and permanency of the gastropexy; most of those that participated showed close contact of the gastric wall to the abdominal wall, indicating good adhesion. The biggest postoperative concern was that the stomach might be damaged during subsequent midline laparotomy. Of the 13 dogs that underwent a second midline abdominal incision, none had reports of complications, stomach perforation, or gastropexy site disruption. The authors conclude that VMG is a quick, reliable method of gastropexy, with a low complication rate.

Global Commentary

Many studies have compared the strength of different surgical techniques for gastropexy in vitro and have shown similar results for the more commonly used techniques (ie, incisional, circumcostal, belt-loop, ventral midline gastropexies). Many surgeons have concerns about complications during subsequent coeliotomies (eg, risk of entering the stomach, loss of visualization in surgeries of the cranial aspect of the abdomen) after use of the ventral midline gastropexy technique. However, this study found only 6.4% of dogs required a second abdominal surgery, all of which could be performed without problems. Still, lack of visualization of the entire liver and difficulty in manipulating the stomach when it is fixed in the midline can make subsequent surgeries (eg, for hepatic tumors) more challenging.

I usually perform an incisional gastropexy, as I can do it quickly. Although this technique is slower than a ventral midline gastropexy, studies have shown the strength of the resulting adhesion to be similar. Nevertheless, this study demonstrates that a ventral midline gastropexy is a useful, simple technique, and probably the quickest. This is an important consideration for surgeons who do not typically use it when they are faced with an unstable patient with speed critical for patient survival.
—Esteban Pujol, DVM, DECVS

Source

Ullmann B, Seehaus N, Hungerbühler S, Meyer-Lindenberg A. Gastric dilatation volvulus: a retrospective study of 203 dogs with ventral midline gastropexy. *J Small Anim Pract*. 2016;57(1):18-22.

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Orthopedic Surgery-Associated Pain in Cats

NSAIDs are used widely in veterinary medicine; however, few are approved for use in cats. Robenacoxib (Onsior, onsior.com), a cyclooxygenase-2 (COX-2)–selective NSAID, is registered for use in dogs and cats and is available in oral and injectable formulations. Robenacoxib is considered relatively safe in cats, likely because of its COX-2 specificity, short half-life (≈1.5 hours), and blood and selective tissue distribution. This study sought to compare the efficacy and safety of robenacoxib with meloxicam (also a preferential COX-2 inhibitor with a longer half-life) in controlling perioperative pain and inflammation associated with orthopedic surgery in cats. In this multicentered, prospective, randomized, blinded study, 101 cats (Group 1) received subcutaneous robenacoxib (2 mg/kg) preoperatively, followed by oral robenacoxib (1.0-2.4 mg/kg) for 9 days postoperatively. Group 2 cats (n = 46) received 0.3 mg/kg meloxicam SC preoperatively, followed by placebo tablets for 9 days postoperatively. (Meloxicam was not registered for postoperative use in cats.) Rescue analgesics were given as needed. Cats were assessed using numerical rating scales preoperatively, acutely postoperative, and at the final visit (day 10). A single preoperative robenacoxib injection was found statistically equivalent ("noninferior") to meloxicam in efficacy. During the follow-up period, no significant difference in outcome was found between