

capsules

THE CURRENT LITERATURE IN BRIEF

A Better Prognosis for Mesenteric Volvulus

Mesenteric (or intestinal) volvulus is a rare disorder in dogs that involves intestinal rotation at the root of the mesentery. The rotation causes occlusion of the cranial mesenteric artery, and obstruction of this artery leads to blood flow deprivation of the distal duodenum, jejunum, ileum, cecum, ascending colon, and proximal descending colon, resulting in necrotic bowel tissue, toxin release, and shock. Onset can be rapid and acute, and the prognosis is grave, especially in German shepherds. The clinical signs, including abdominal pain, abdominal distention, bloody stool, pale mucous membranes, rapid heartbeat, and weak pulse, can lead to death. Diagnosis is based on radiography, and a specific cause is not usually evident, although it has been associated with other intestinal conditions, such as parvovirus infection, worm treatment, enteritis, and carcinoma.

In this retrospective study of 12 cases (mostly male, adult, medium- to large-breed dogs) over a 9-year period, dogs with suspected mesenteric volvulus were immediately treated for shock and surgical intervention was begun as soon as possible. Diagnosis was confirmed at surgery or necropsy. Each dog presented with a different set of signs of 2 to 12 hours in duration, and no dog had a history of trauma. Radiography was done and showed severely distended, gas-filled loops of small bowel lying parallel to each other, indicative of volvulus. Gastric dilatation–volvulus was also present in 2 of the dogs. Supportive treatment for shock and stomach intubation to relieve abdominal pressure were initiated in all dogs before radiography. Euthanasia was done in 2 cases in which the owners declined surgery and in 3 dogs that had necrosis of a large portion of the small bowel. Two dogs died during surgery, and 1 dog had excision of a 1-m segment of necrotic jejunum. In 5 of the 12 cases, derotation of the mesenteric root was accomplished surgically, and recovery of the circulation and intestinal motility followed: these patients survived. Because the patient's condition deteriorates rapidly and signs are nonspecific, the authors speculate that delays in surgery could account for the high mortality rate associated with this condition and recommend emergency exploratory laparotomy in all suspected cases.

COMMENTARY: The 42% survival rate in this study is much higher than previously reported. As is true in gastric dilatation–volvulus, early recognition and aggressive medical and surgical management contribute to increased survival. The authors' recommendation for immediate exploratory surgery in animals with suggestive clinical signs and radiographic appearance is sound advice.—*Eric R. Pope, DVM, MS, Diplomate ACVS*

Mesenteric volvulus in the dog: a retrospective study of 12 cases. Junius G, Appeldoorn AM, Schrauwen E. J SMALL ANIM PRACT 45:104-107, 2004.