What is gastric dilatation-volvulus?

Gastric dilatation-volvulus (GDV) is otherwise known as “bloat,” “stomach torsion,” or “twisted stomach.” The cause of the condition is unknown. It can have tragic consequences and result in death in as short a time as 2 to 3 hours. The stomach bloats as a result of rapid accumulation of gas. Eventually, the distended stomach rotates around its supporting ligaments, trapping the gas and choking off its own blood supply. The distended stomach presses on the chest, making it difficult for the dog to breathe, and compresses large veins in the abdomen, preventing blood from returning to the heart. The difficulty in breathing and the poor blood flow eventually result in collapse and death unless treatment is prompt.

What are the symptoms of gastric dilatation-volvulus?

The symptoms of gastric dilatation-volvulus include the following:

- Distention of the abdomen (if the abdomen becomes drum tight, the diagnosis is almost certain)
- Loss of appetite
- Frequent retching
- Abdominal pain
- Distress
- Eventual collapse

Treatment of gastric dilatation-volvulus is successful in up to 70% of cases if the owners recognize the signs of the disease promptly. The most important sign is distention of the abdomen.

What treatment is needed?

Treatment begins with rapid intravenous fluid therapy (to replenish lost fluid and improve blood flow) and decompression of the bloated stomach. Decompression of the gas-filled stomach is usually performed by placing a needle directly into the stomach through the abdominal wall or by passing a tube into the stomach via the mouth. Drugs may be required, including antibiotics, drugs to help prevent shock, and drugs to reduce damage to the stomach lining.

When the dog is in as fit a state for surgery as possible, it is anesthetized and operated on to return the stomach to the normal position. In addition, the surgeon will attempt to suture the stomach to the abdominal wall in the correct position in the hope of preventing a further bout of
bloat. This is called a “gastropexy.” Without this procedure the likelihood of recurrence of the bloat is as high as 80%.

If the surgery reveals extensive areas of dead stomach, the likelihood of the dog surviving the postoperative period is very low. Sadly, in this situation, a veterinarian may advise euthanasia of the dog on the operating table to avoid further suffering.

What is the prognosis?

The postoperative period is full of risk for dogs with bloat. Abnormal beats of the heart are common postoperatively, as are life-threatening problems such as severe ulcers or holes (perforations) in the stomach and bowel, pancreas or liver damage, infections, and excessive blood clotting. For this reason, dogs usually remain at the veterinary clinic under close observation for several days after the surgery.

What can be done to prevent gastric dilatation-volvulus?

Prevention of gastric dilatation-volvulus is difficult because the underlying cause or causes of the disease are unknown. However, some risk factors that predispose a dog to develop bloat have been recognized.

Avoidance and/or management of the following risk factors (where possible) minimizes the likelihood of the disease occurring:

- Be especially wary of symptoms of GDV where large, deep-chested dog breeds are concerned. Dogs with this type of conformation are predisposed to this disease. Examples of such breeds include Great Danes, Saint Bernards, Weimaraners, Irish Setters, Dobermans, and German Shepherds, among others.
- Eating only one meal per day – this leads to a larger stomach size than eating two or more meals
- Eating faster
- Nervous temperament
- Exercise on a full stomach
- Genetically predisposed dogs in stressful situations

Contacts for Further Information

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