

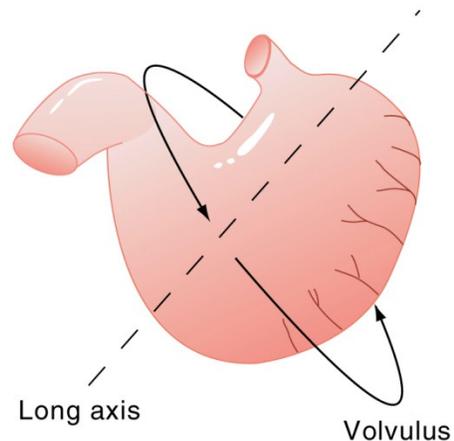
GASTRIC DILATATION AND VOLVULUS (GDV) **Commonly referred to as “Bloat”**

What is GDV?

Gastric Dilatation and Volvulus (GDV). The term refers to a gas-filled stomach that twists upon itself. It is a potentially life threatening medical emergency that requires surgery to correct, right away.

What causes the condition?

The exact cause is still unknown. The most common history is a large breed dog that eats or drinks rapidly and then exercises. In recent studies, stress was found to be a contributing factor to GDV. Dogs with a more relaxed and calm personality were at less risk of developing GDV than dogs described as “hyper” or “fearful.” Sometimes the condition progresses no further than simple gastric dilatation, but in other instances the huge, gas-filled stomach twists upon itself so that both entrance and exit to the stomach become occluded. The medical emergency occurs with the twist, as dilation with gas can sometimes resolve on its own. Gastric dilatation (bloat), usually without volvulus (twist), occasionally occurs in elderly small dogs.



Is GDV serious?

Yes. This is probably one of the most serious non-traumatic conditions seen in dogs. Immediate veterinary attention is required to save the dog's life.

Are some dogs more prone than others?

Yes, statistically we know that large, deep chested breeds are more prone to GDV. These include Great Danes, Saint Bernards, Weimaraners, Irish Setters, Gordon Setters, Standard Poodles, Basset Hounds, Doberman Pinschers, Old English Sheepdogs, German Shepards, Akitas, etc. Most commonly, the condition occurs within two to three hours of eating a large meal.

Additional facts about GDV:

The problem often begins with anxiousness, pacing, discomfort and sometimes stretching the belly. This progresses in a short time to unsuccessful attempts to vomit – lots of abdominal heaving and gagging that produces nothing but a small amount of white foam. The distended stomach pushes the rib cage out, so that the dog's belly appears swollen or “bloated”. This is most obvious on the left side and gentle tapping of the swelling just behind the last rib often produces hollow, drum-like sounds. The enlarged stomach presses on the diaphragm and breathing becomes labored. The swollen stomach also presses on the larger blood vessels in the abdomen and circulation is seriously compromised, resulting in shock. Ultimately, the dog collapses and the huge size of the abdomen can be seen as the dog lies on its side.

Is it possible to distinguish between gastric dilatation (GD) and gastric dilatation and volvulus (GDV)?

These two conditions often look identical on physical examination. X-rays and other diagnostic tests are necessary to determine whether or not the stomach has twisted.

Why does the dog collapse?

The gas filled stomach presses on the large veins in the abdomen that carry blood back to the heart, compromising the circulation of blood. Vital tissues become deprived of blood and oxygen, resulting in systemic shock. In addition, the pressure of the gas on the stomach wall results in inadequate circulation to the wall, causing tissue death. Digestion ceases and toxins accumulate in the blood, exacerbating the shock. As the distension continues to build, the stomach wall can rupture.

What can be done?

Veterinary assistance must be sought immediately. It is imperative that the pressure on the stomach wall and internal organs is reduced as soon as possible. The veterinarian may first attempt to pass a stomach tube, after sedating the dog. Sometimes we get luck and this solves the problem. If it is not possible to pass a stomach tube due to twisting of the stomach, a large bore needle may be passed through the skin into the stomach to relieve the pressure in the stomach.

Shock treatment by administering intravenous fluids and medications will begin immediately. Once the patient has been stabilized, the stomach must be returned to its proper position. This involves major abdominal surgery and may be delayed until the patient is able to undergo anesthesia. If the pressure cannot be relieved, surgery will need to be done right away in order to save the dog's life.



How is the surgery done?

The primary goals of surgery are to return the stomach to its normal position, to remove any dead or dying stomach tissues and to help prevent future GDV. There are several techniques available including *gastropexy* (suturing the stomach wall to the abdominal wall) and *pyloroplasty* (surgical opening of the pylorus to improve stomach outflow). Your veterinarian will discuss the technique or combination of techniques best for your pet's condition.

What is the survival rate?

This depends upon how long the pet has had GDV, the degree of shock, the severity of the condition, cardiac problems, stomach wall necrosis, length of surgery, etc.

Even in relatively uncomplicated cases there is a mortality rate of 15-20% for GDV. Mortality rate can be higher for complicated cases. Decades ago, a diagnosis of bloat was almost always a death sentence because only 25% survived. Today the survival rate is better than 80%. Part

of the reason for this is increased owner awareness. The earlier the veterinarian gets started with treatment, the better chance there is for survival.

Can the condition be prevented?

Gastropexy (surgical attachment of stomach to the body wall) is the most effective means of prevention. In high-risk breeds, some veterinarians recommend preventative gastropexy, often done at the time of spay, neuter or other elective procedure. This does not prevent dilatation (bloat) but does often prevent twisting (volvulus) in the majority of cases.

Careful attention to diet, feeding and exercise regimens may help to prevent gastric dilatation. Elevated feeding may actually increase the risk of GDV in some patients. Smaller kibble size, feeding smaller more frequent meals, and not breeding animals with a history of GDV in their lineage may potentially decrease the risk of GDV for the animal and future generations.

Please do not hesitate to discuss any concerns you have regarding this serious condition with your veterinarian.

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