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## **GASTRIC DILATATION AND VOLVULUS (GDV)**

### ***What is GDV?***

Gastric Dilatation and Volvulus (GDV) is a life threatening disorder most commonly seen in large, deep-chested dogs. The term refers to a gas-filled stomach (bloat) that then twists upon itself. It is a medical emergency that usually requires surgery to correct.

### ***What Causes the Condition?***

The definite 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 that were found to be more relaxed and calm were at less risk of developing GDV than dogs described as "hyper" or "fearful". Sometimes the condition progresses no further than simple dilatation (bloat) but in other instances the huge, gas-filled stomach twists upon itself so that both entrance and exit (cardia and pylorus) are occluded.

### ***Is GDV Serious?***

Yes. This is probably one of the most serious non-traumatic conditions. Veterinary help is needed without delay.

### ***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, and Old English Sheepdogs. Most commonly the condition occurs two to three hours after eating a large meal.

These are the facts:

- The condition almost always occurs in giant or large breed dogs with narrow, deep chests.
- Gastric dilatation, usually without volvulus, occasionally occurs in elderly small dogs.
- The distended stomach pushes the posterior rib cage so that the dog 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 appreciated as the dog lies on its side.

## ***Is It Possible to Distinguish Between Gastric Dilatation (GD) and Gastric Dilatation and Volvulus (GDV)?***

No. These two conditions often look identical on examination. X-rays and other diagnostic tests will establish 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. Tissues become deprived of blood and oxygen resulting in shock. In addition, the pressure of the gas on the stomach wall results in inadequate circulation and the stomach tissues will begin to die and may rupture. Digestion ceases and toxins accumulate in the blood, exacerbating the shock.

## ***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. If this is not possible 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 will begin immediately by administering intravenous fluids and medications.
- 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.

## ***How is the Surgery Done?***

The primary goal of surgery is to return the stomach to its normal position, remove any dead or dying stomach tissues and 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.

## ***Can the Condition Be Prevented?***

Gastropexy (surgical attachment of stomach to body wall) is the most effective means of prevention. In high-risk breeds, some veterinarians recommend prophylactic gastropexy. This does not prevent dilatation (bloat) but does prevent twisting (volvulus) in the majority of cases.

Careful attention to diet (increased fiber), feeding (frequent small feedings), and exercise (decrease exercise after eating) regimens help to prevent dilatation.

Please do not hesitate to contact us to discuss any concerns you have regarding this serious condition.