Gastric Dilatation and Volvulus (bloat)

Gastric dilatation (or bloat) occurs when a dog’s stomach becomes very full of air. If the stomach then twists, the condition is described as gastric dilatation and volvulus (GDV). Sometimes the term “gastric torsion” is used instead of GDV.

GDV is fatal if untreated, and dogs with the condition deteriorate very rapidly. It is important that all dog owners are aware of the signs of GDV so that they can seek veterinary help early on if their dog is unlucky enough to develop the problem. Just as importantly, owners of large breed dogs (who are most at risk from the condition) should be aware of the measures that they can take on a day to day basis to reduce the chances of their dog suffering from GDV.

What are the signs of gastric dilatation volvulus?
Dogs with GDV usually start to show signs of a problem a couple of hours after eating. Initially they are restless and appear to be uncomfortable. As time progresses they become weak and lethargic. Eventually they become collapsed and unable to stand. Most dogs with GDV will make repeated attempts to vomit, but will either bring up nothing, or will bring up a white, frothy fluid. They may also salivate excessively. The abdomen becomes swollen and enlarged, and as the condition progresses the skin over the abdomen becomes stretched and taut, like a drum.

Why is gastric dilatation volvulus so dangerous?
Once the stomach has twisted, the food and gas within the stomach cannot be released. As the food in the stomach ferments, more and more gas is produced and the stomach gets larger and larger. The stomach becomes so large that it compresses the caudal vena cava which drains blood back to the heart. This affects the ability of the heart to deliver blood to the rest of the body and results in low oxygen levels in the tissues. The stomach also presses on the lungs and makes breathing difficult. As the body tissues are not receiving enough blood and oxygen they start to release toxins into the bloodstream and this causes the body to go into shock. If the dog is not treated, the condition is fatal. The progression from the initial symptoms to death can occur in a matter of hours.

What should I do if I suspect that my dog has gastric dilatation volvulus?
If your dog is showing signs of GDV you must contact the surgery immediately and tell them that this is what you suspect. All suspect cases will be asked to attend the surgery immediately. It is essential that you telephone before setting
off as it enables the veterinary staff to prepare the necessary medication and equipment before you arrive.

It is not at all possible to treat this condition in your home. The faster you can get your dog to the surgery, the better his/her chances of survival are. If you have a large dog and do not have your own transport it is very sensible to keep the telephone number of the animal ambulance service, or a taxi willing to take dogs in a safe place so that you can find it in an emergency.

**What is the treatment for gastric dilatation volvulus?**

If gastric dilatation volvulus is confirmed by the veterinary surgeon you will be asked to leave your dog at the veterinary surgery for treatment. Intravenous fluid therapy will be commenced immediately to combat shock, and the vet will attempt to pass a tube into your dog’s stomach to release the gas. If the stomach is too twisted then this is not possible, and a special needle will be used to empty the gas from the stomach through the abdominal wall. Once the stomach has been emptied and the dog is more stable, a general anaesthetic is given. An operation is performed to enter the abdomen and untwist the stomach back into its normal position. At this stage the vet can assess the damage that has occurred to the stomach and other abdominal organs. Sometimes it is necessary to remove part of the stomach and/or the spleen.

Dogs that have had one episode of GDV are likely to have another one. For this reason we recommend stitching the stomach into the correct position so that the chances of it twisting in the future are minimised. This procedure is known as a gastropexy and is usually performed immediately after correcting the twist.

After the surgery your dog will remain hospitalised for several days. Continued fluid therapy and medication are required to help the body recover. It is also important to monitor the dog for complications which can develop in the first few days after the GDV, in particular problems with the heart rhythm.

Treatment of GDV requires a well equipped surgery with good operating facilities, experienced veterinary staff, and a variety of medications. Dogs with GDV will be worked on by at least one vet and one nurse for several hours before stabilisation is achieved. Intensive care and monitoring will then continue for several days. Taking all of this into account, it becomes apparent that this treatment will be fairly costly. An average episode of GDV, presenting at night, could easily cost £2000, and this cost could rise if complications developed. We strongly recommend pet insurance so that if your dog is unlucky enough to develop GDV we are able to provide the best possible care without you worrying about how to pay for it.

**What are the success rates for treating gastric dilatation volvulus?**

The success rates vary depending on how long the problem has gone on before treatment commences. In general, survival rates of 80% are reported with prompt treatment. However, if treatment is not commenced until the animal has collapsed, success rates are very low.

**How can I prevent my dog from getting gastric dilatation volvulus?**

Whatever we do, some dogs will inevitably develop GDV and it is nothing to feel guilty about if it happens to you. We rarely see the condition in small dogs,
but large and giant breed dogs, particularly those with a deep chested conformation (e.g. German Shepherds, Setters, Wolfhounds, Great Danes) are known to be at much greater risk. Therefore, if you have a large or giant breed dog, it makes sense to do what you can to prevent the condition occurring. We recommend:

1. Split your dog’s daily feed ration into two or three feeds daily, rather than one large feed.
2. Do whatever you can to make your dog eat slowly. Putting large, smooth objects in the food bowl so that your dog has to eat around them can help to slow down eating. Suggested objects are very large, smooth stones/bricks, or a large, heavy chain. Whatever you use, make sure it is far too large for your dog to swallow or you may cause a different problem! In a multidog household or kennel situation it is also wise to feed dogs separately so that they are not competing to finish their food.
3. Stick to regular feed times.
4. Avoid exercise an hour before feeding and two hours after feeding.
5. Stick to one type of food for your dog. Keep other human and animal food out of reach (we have seen cases of GDV after dogs have broken into food stores).
6. If your dog is having abdominal surgery for another reason, such as a bitch spay, it is possible for us to carry out a prophylactic gastropexy at the same time. Your vet will be happy to discuss this with you.

What should I do now?
This article is intended to raise awareness of GDV in owners of susceptible breeds. It is not intended to frighten you! The incidence of GDV in large/giant breed dogs is 6% which means that 94% will never have a problem with the condition. Please ask our veterinary surgeons or nurses if there is any part of the article that you do not understand. If everything is clear, then make the necessary adjustments to your dog’s feeding and management and put the rest of the information to the back of your mind!