

Pure Dog Talk 468 – Bloat 911 Know the Signs

Pure Dog Talk is the voice of purebred dogs. We talk to the legends of the sport and give you the tips and tools to create an awesome life with your purebred dog. From showing to preservation breeding, from competitive obedience to field work, from agility to therapy dogs, and all the fun in between, your passion is our purpose.

Imagine no longer worrying about paying expensive, unexpected vet bills out of pocket and having to wait for reimbursement. It's possible with Trupanion, medical insurance for pets. Let the Trupanion policy take the hassle and confusion out of insurance with their ability to provide payment directly to your veterinarian. If you're a breeder, you can also send your litters home with a special offer of the same great coverage through their breeder support program. And that's at no cost to you. Last year, the Trupanion policy paid out over 42,000 claims for pets as part of this program. Just sign up via the link on my partner page, and don't forget to mention Pure Dog Talk sent you.

Laura Reeves:

Welcome to Pure Dog Talk. I am your host, Laura Reeves. And today we have back my dear friend, Marty Greer, and we are going to talk about bloat. There's a name for it, that's the special medical name. What is it, Marty? I can never say it right.

Dr. Marty Greer:

Gastric dilatation and volvulus.

Laura Reeves:

There you go. And it's something that most of us who have large breed dogs have either heard of or encountered. And if you have not encountered it, it is terrifying and it is a real and literal emergency. We talked about this very briefly in a sort of emergency treatment podcast I did with a really good friend of mine that's an emergency room vet a number of years ago, but I really wanted to kind of drill down on exactly what bloat is, how we know it's happening, what to do about it. I know there's a ton of research and I know you're always up on the research, anything you've heard about most recent research. So all that.

Dr. Marty Greer:

Yes. And it is terrifying. It's up there with hit by cars and pyometra as one of the great three feared diseases, disorders that we see coming through our front door. So it's feared by the owners. It's feared by the veterinary clinic staff because they are all major life crises. So yes, it is one of the big three really disastrous things that happen.

Laura Reeves:

Let's start with what happens when a dog is... I have a chart that I use all the time, it's posted in my kennel room, and I will include that in this. But talk us through what's actually going on physiologically with the dog when this happens.

Dr. Marty Greer:

Sure. And unfortunately, there are parts of this that no one still understands, even though we've known about gastric dilatation and volvulus, GDV or bloat, we've known about it for decades and decades. I mean, when I was in veterinary school, it was a big deal. And unfortunately we have still a lot of holes in the knowledge of what we have about it.

So essentially what happens is the stomach fills with fluid, air, food, different materials. And in gastric dilatation it dilates. In gastric dilatation and volvulus it dilates and then rotates inside the abdomen. So it can be one or both. And the distinguishing feature is going to be available only by x-ray. So it's the only imaging that we really have. But just looking at a dog at a dog show, or in your hotel room, or at your house in your kennel, in the veterinary lobby you can't tell the difference between a volvulus and a dilatation. So an x-ray is needed to determine what's going on.

So what happens is that some material starts to fill the stomach and it starts to dilate. And there's some kind of an outflow obstruction, which is not clearly identified, which keeps the fluid and gas from being able to go down into the small intestine. And so the stomach dilates further, and further, and further as fluid is secreted into the stomach, as gas is produced either by fermentation or by gulping the air. And the dogs typically will attempt to vomit, but are

unproductive in their efforts to vomit. So that's probably the one distinguishing thing that you can determine when you're looking at a dog is the abdomen is distended. But if they're able to productively vomit, if food is coming up, if fluid is coming up, it's probably not a bloat. If their efforts to vomit are unproductive, you have a genuine life crisis, medical emergency on your hands and you cannot get to a veterinary clinic for care fast enough.

Laura Reeves:

That is absolutely true. I owned Akitas. I showed a ton of Akitas. I showed Irish wolfhounds. I show, and own, and breed German wirehaired pointers, all breeds very much prone to bloat. I have lost dogs to bloat. I have saved dogs from bloat. So this is one that gets me a little verklempt, but it is literally... I know dogs... I had an Akita, someone else's dog in my setup, she was grooming it. I went to check her ring, literally was gone 20 minutes and the dog was fine when I left and gone when I came back. And she had left for the vet clinic, because it had started to bloat on the table.

Dr. Marty Greer:

Yeah. Yeah. So there are some correlations that people have made with the time of eating and the amount of exercise afterwards, but there's not a strong correlation. You can have things happen that you follow every single guideline that you possibly have ever read about to try and reduce the risk of it. And it can still happen anyway. And that's what's really devastating about it is, you feel really helpless because you can't prevent it and you can't predict it. And when it happens, it doesn't matter what time of the day it is, you need immediate medical care half an hour ago.

Laura Reeves:

Yes. That was the one I was going to go to. You have 30 minutes, get on it. This isn't an option.

Dr. Marty Greer:

No.

Laura Reeves:

And it is obscenely painful for the dog.

Dr. Marty Greer:

Yeah. Yes.

Laura Reeves:

The screaming in pain will never leave me. So, okay, you are at home, on the road, at a dog show, grooming your dog on the table, whatever it is, you see a dog that starts to look a little, I call it kind of walleied. They kind of look at you and I'm to the point now, after 20, 30 years of this, I can see it. And maybe they whip around and they look at their stomach like they don't know what's going on. Maybe they're antsy. Maybe they're trying to throw up, you mentioned. And when you say their stomach is distended, describe it. Because to me it feels like a basketball, literally that much tension.

Dr. Marty Greer:

Right, watermelon, basketball. When you thump it, it can sound like a watermelon. And some of the really long ribbed dogs can be more difficult to assess that in. I've seen German Shepherds that are long ribbed, short loin dogs that you walk in the room and you're like, "No, it doesn't really look like a bloat." And then you take an x-ray and say, "Oh yeah, it's a bloat." So if there's any possibility that there's a little inkling, that something's not right, if the dog is restless, won't lay down, won't eat, won't drink, and is really non-productively trying to vomit, you go get an x-ray. Period. End of discussion. You call the emergency clinic on your way. You tell them what you have for a breed. You tell them the circumstances and you say, "I'm coming in for an x-ray." And you hope to God that there's not six other really serious medical emergencies ahead of yours so that you can get the immediate attention that's required.

If you have the option of going to two different practices, you'll probably want to call ahead and see who can accommodate you when you arrive, because there is no sitting in the parking lot and waiting. There is no calling in the

surgeon. There is no, "We'll get around to you when we get around to you." It is right now, this is something that has to be medically managed.

So the other thing some people do is they will learn how to pass the stomach tube with their own dog. So if you're living in a remote area or you're traveling to remote areas and you're not sure what the veterinary care is, it probably would be a good idea to learn from a veterinarian. This is not a do it yourself at home kit, learn from a veterinarian, how to pass the tube and get the equipment that you need, which is basically a stomach tube, some way to hold the mouth open with a roll of tape or some other device to keep the dog from biting the tube off, because then you have a different medical emergency, and some kind of lubrication so that you can effectively pass the tube. And somewhere between half and 75% of the time, you can effectively pass a stomach tube and at least relieve the distension, which is not a solution, but it buys you some time. So have your veterinary clinic teach you, take a first aid class on medical care for dogs, learn from someone that's experienced in how to do this, and figure out how to pass the tube in case you do end up in a circumstance that you don't have a choice.

Now, if you can't get the tube past, you can't force it. You can cause damage by pushing too hard. But if you can release some gas, then it buys you a little bit of time until you can get the rest of the veterinary care taken care of.

And the problem is this becomes this really vicious cycle of metabolic, and respiratory, and circulatory disasters that just feed on each other. So as soon as the stomach starts to fill with gas, the dog develops acidosis. They can't produce any vomit. The stomach starts to press on the diaphragm so they can't breathe adequately. And then their circulation starts to slow down because there's pressure on the vena cava. And there's all these metabolic cascades that start to happen that become a vicious cycle. And one makes the next part worse, which makes the next worse, which makes the next worse, which is why the dogs decompensate and die of shock, or ruptured stomach, or cardiac malfunctions, some kind of disorder. The heart will start to throw irregular beats. The dog goes into DIC. I mean, it's just this whole cascade of disastrous things. So if it can go wrong, it happens during bloat. There's just nothing good you can say about it.

I've seen dogs tear their spleen off of their stomach. There's a ligament that attaches to it. I saw a dog was hit by a car at one point and her spleen headed here to a different part of her abdominal cavity and so when her stomach rotated, the spleen tore off. So there's just all these things that happen in this cascade of events. So it is bad, bad, bad. And it's generally a problem of the giant and large breed dogs, but I've seen it in a beagle. I've seen it in a corgi. So just because you have a small dog doesn't mean that you couldn't potentially have a bloat. We had a food bloat that turned out to be fatal in an employee's dog, in a four month old Labrador puppy.

Laura Reeves:

That's unusual.

Dr. Marty Greer:

Yeah, it was terribly unusual. And she's a very skilled technician, now is a very skilled emergency room nurse. But in spite of her best efforts, her recognizing early on what was going on, our best efforts, we weren't able to save the puppy. So just because you have a young dog, just because you have a breed that isn't typically predisposed doesn't mean you couldn't possibly have it.

But what I think is really interesting is that in recent years, we've determined that it's more common as dogs are aging. So the aged or middle-aged dog is actually at increased risk. And we think it's because the ligaments become more loose and more likely to allow that rotation to take place.

Laura Reeves:

Right.

Dr. Marty Greer:

So you have to take all age groups into account when you're looking at what's going on.

Laura Reeves:

The one I lost to it was a four year old wirehaired pointer. I had a four-year-old Akita that I lost. And the wirehair was not with me. The Akita, I got him in, I got them tact. And we're going to talk about that in a minute. And he bloated again and blew the tack.

Dr. Marty Greer:

Yeah.

Laura Reeves:

And the vet couldn't pass a tube. And I was unwilling to go in and... I mean, three months later, and do this again.

Dr. Marty Greer:

Right.

Laura Reeves:

So a couple things I wanted to run by you because they're things I use and have recommended. I keep Gas-X in every single part of my house, vehicle, kennel. I have saved more dogs than I've lost because I know it when I see it. And if somebody even looks at me funny, they get a Gas-X, right now.

Dr. Marty Greer:

Yep. And you can't cause harm with Gas-X.

Laura Reeves:

Right.

Dr. Marty Greer:

The good news is, you're not going to hurt anybody by giving it and then saying, "Oh gosh, I guess I didn't need to give it." The only thing you'll cause harm with is if you don't go back and replenish that supply because you used it.

Laura Reeves:

Yes. I'm not kidding when I say there's Gas-X everywhere. So that's a thing that you can use when you don't have a tube handy or you don't have that skillset. Gas-X is something that you can have on hand.

Hang tight. Guys got a little bit of information for you. We'll be right back to the podcast in a minute.

All right crew, check it. Dog events are happening. For exhibitors who are able and willing to attend these events, it feels as if our tribe has been reunited once again. Meanwhile, for folks who are continuing to feel safest staying at home and away from crowds, and for folks who are driving long haul between far flung events, I got you. I've been working hard to bring you all podcast episodes that help you feel connected to our larger community and offer opportunities for education and entertainment no matter how you have managed through this truly overwhelming year.

One of my favorite events this year is the monthly virtual Pure Dog Talk After Dark for patrons of our podcast. Anybody can join this fabulous community of dog enthusiasts by visiting the website and clicking on the Become A Patron link on the homepage. And while you're there zooming around on the site, you might think about checking out our shopping tab too. We've linked dog show vendors from all around the country, so you can help support them during this really grueling loss of income suffered due to a lack of events. There's even a Swag link that lets you order your Pure Dog Talk t-shirt, sweatshirts, fan case, mask, ringside towel, and so much more. Like the NPR of dogdom, Pure Dog Talk is here for you every day to make sense out of everyday things, to add nuance to your understanding, and tools to your tack box, to

bring history to life, and propel the living history of purebred dogs into the future. So check out the links at www.puredogtalk.com. Your support adds up to a huge voice for purebred dogs.

Laura Reeves:

Let's talk about tacking, stomach tacking. So if your dog bloats, you're into the clinic, they're going to take that dog into surgery. And so talk about what that process looks like, would you?

Dr. Marty Greer:

Sure. And there's virtually no dog that if it bloats, you should avoid surgery on. Almost every dog is going to require surgery, either to manage what they currently have, to assess what they currently have, or to prevent the future. So if you have an 11 year old Great Dane that you live with, think about what you're going to do if that dog bloats. So that before that happens, you have in your head, this is what I'm going to do. So, you know if you're going to treat, you know if you're going to euthanize, you know if you can afford to do it. Don't wait until it happens. It's inevitable that a certain percentage of dogs are going to bloat. And there certainly a line of dogs, we know clients that have lines of dogs that predisposed to bloating. So they will automatically prophylactically tack those dogs.

So we'll talk about prophylactic tacking, separate from tacking during the procedure. So the first thing that happens, you get into the veterinary clinic, they place an IV catheter. They start managing the dog's fluid rate, and they get an x-ray, and they decompress the stomach as fast as they possibly can. And whether that's with a tube or trocar now, I would never suggest that a client trocar, which is putting a needle through the abdominal wall, because you can put the needle in the wrong place. So don't try that.

The veterinary clinic is going to place one or two IV catheters. They're going to get the dog to x-ray. They're going to decompress the stomach as fast as they can. And then they're going to turn around and say, "Okay, you have exactly 1.2 seconds to start making decisions about how you want this dog's care to go." So this is not the time to start looking at your Care credit card or at your bank account to say, "Can I afford to do this?" You need to know.

They will take them to surgery. They will assess the blood flow to the stomach, blood flow to the spleen, other types of organs that may be involved, the dog's general condition. They'll probably need to do an EKG and monitor that EKG, both pre-op, during surgery, and post-op because for up to several days after the surgery you can still have irregular heartbeats, PVCs that are thrown because of the metabolic problems that are going on in the compression of the heart. So there's a whole array of things that all have to happen really fast. And you hope that you've got a veterinarian that has experience with this and knows bang, boom, what to do. And you should have a pretty good idea of what that's to look like before you go in.

So you go to surgery, you assess the spleen, you assess the stomach, you look for any kind of damage to the stomach, if you have to take out a portion, if you have to take out the spleen. We try to avoid those things if you can, but you can't always. The stomach is assessed, repositioned, and then it's tacked, and there are a number of different tacking techniques. So you go with the one that the surgeon has had good success and good experience with, and they all work pretty well. But you can reduce the risk of re bloating and flipping the stomach from about 80% in the dogs that have already had one occurrence down to about 5% by tacking the stomach. Does it mean it always works? Obviously not because you've seen it happen again.

Laura Reeves:

Doesn't.

Dr. Marty Greer:

But it's a much, much smaller risk. You drop it by 75%, so that's pretty great.

Laura Reeves:

Tacking the stomach, I just want to make sure people understand. You're literally sewing the stomach to the side of the dog. Is that my understanding?

Dr. Marty Greer:

There's a couple of ways to do it, but yes. It basically adheres the stomach so that inside the abdominal cavity, it can still move enough to do its job of taking in food, and digesting it, and passing it into the intestines but it can't rotate inside the abdomen. So it is adhered down and there are a number of different techniques just depending on what surgeon, and what training they've had, and what the actual physiology of what's going on at the time of that particular procedure is going on. But yes, it is tacked. It is adhered to the abdominal wall in some fashion so that you reduce significantly the risk that it's going to flip in the abdomen again. The dog can still dilate, but it reduces the risk of a flip, a rotation, whatever you want to call it, a volvulus is the technical word for it, by about 75%. so that the dog then can be managed with a stomach tube and/or trocar if necessary, if the dog bloats again.

So the only thing that we know that reduces the risk of gastric dilatation and volvulus in the dog, other than tacking, which should never be a substitute for using good judgment, is feeding the dogs twice a day, feeding with an elevated food dish, feeding dry kibble or wet kibble, using medications to help the stomach to empty more quickly, reducing exercise before and after eating. None of those things have as strong a correlation as feeding two meals a day versus one. So I always recommend that my dogs, when they leave my home, I tell clients always feed twice a day, never feed once a day, because it's going to significantly reduce the risk of a bloat. And yes, I have corgis, but like I said, I've seen a corgi die from a bloat. So it can occur even in the small breed dogs. It's typically that real narrow chest to deep chest ratio. So the standard poodle, the Irish setter, you see those dogs to that really narrow, deep chest. Those are the dogs that in greatest risks, but Mastiffs and Newfoundlands, Rottweilers, they don't have a narrow chest.

Laura Reeves:

No.

Dr. Marty Greer:

Yeah.

Laura Reeves:

I want to go back and touch on, because I think this is absolutely something that, at least the research I've seen, while it is not conclusive, does indicate sort of that it runs in families. So there has to be some sort of, we don't know what, genetic component is that correct? Because that's what I've seen in the breeds that I've been involved with, that this is the case.

Dr. Marty Greer:

Yes. Right. And what we can't tell you is whether it's the confirmation of the dog that it's genetics, they have a tendency to have a narrow deep chest. And that's what you handed down genetically to that dog, or whether there's some other factors that come into play, because we don't fully understand this. As many years as veterinarians have studied this, as many years as people have tried different techniques to prevent it, the only thing we know is feeding twice a day and tacking the stomach are really the only two things that we can effectively determine that we can reduce the risks in.

Well, obviously you can stop breeding dogs that have a tendency to do this, but frequently, those are dogs that have other strong genetic tendencies that you want to perpetuate. So you have to look yourself hard in the mirror and say, "Is this okay for me to continue breeding this dog? Or should I start looking at a different line that I can reduce my risk?" Because it doesn't matter if it's your dog or a pet dog that you've placed with someone, it's terribly heartbreaking to see a dog succumb to this. So it has a genetic component to it. There's no DNA test for it. It doesn't mean you couldn't be careful in how you assess those dogs for risk.

Laura Reeves:

I think that that's something that's really important is to, if you're a new breeder, even if you're an experienced breeder, talk to people, talk to the people. If you have a puppy that you're going to buy, and you want to look at this as a breeding potential, ask them about previous bloat experiences in the line. If you're looking at a stud dog, ask them about

previous. I mean, I know in my line exactly where it came from. I was there when the dog bloated at the national, and my friend saved its life with a trocar in the back of the car while I was driving to the vet clinic with him.

Dr. Marty Greer:

Right.

Laura Reeves:

So I know where it came from. I'm careful and I manage how this works, but I know exactly where it came from. And in the Akitas that I worked with, I worked with one client whose dogs were... I mean, she had a dog that I was finishing. I sent it back. It just needed a major. I dropped it off in the morning. It was dead that night. And I had another client whose dogs almost never bloat. So you know that it's there. It's be aware, be knowledgeable. Wouldn't you say that's your... I mean, that's my advice. Your thoughts?

Dr. Marty Greer:

Oh, sure. Right. And so we tack a lot of those dogs prophylactically. So at spays, at surgical breedings, at C-sections, we can do routine tacks that will reduce the risk. At neuters, we can reduce the risk. So having a tacked stomach doesn't mean you can't breed the dog because it doesn't interfere with where we do a C-section, but it's like a lot of other disorders. Like thyroid disease, it doesn't kill your dog, but do you want to perpetuate dogs with thyroid disease or whatever other genetic disorder you might be talking about?

Laura Reeves:

Correct.

Dr. Marty Greer:

So you just have to make a determination on what you want to do with that. And if it's a great line of dogs, then maybe you breed out of that. You don't stop breeding that line.

Laura Reeves:

Breed around is how I've worked with it.

Dr. Marty Greer:

Right. You start talking to people and you hope that the people you're talking to are honest with you about their medical histories. And you hope that they're keeping in touch with the puppies that they've sold so that they know. And if you're selling dogs that you know have an increased risk, just tell them, "Have your dog tacked at the time she's spayed." And off you go. We have to date, of all the dogs that we have prophylactically tacked, I have never had one that I'm aware of, that has come back with a bloat or a volvulus.

Laura Reeves:

That's good to know.

Dr. Marty Greer:

And I do a lot of them, but that may mean that we just have people who are super vigilant and they're really careful about how they feed, and what they feed, and their exercise and other things.

Laura Reeves:

Can we talk about the what they feed? Because this is interesting to me. The Akita that I saved, right, got surgery, got him tacked and then he blew the tack three months later. Right before he bloated, I had changed dog food. And I was feeding a dog food that for me and for this dog was a higher corn ratio basically, higher fiber, less meat sort of thing. And I thought about this a lot over the years, any sense on diet?

Dr. Marty Greer:

Not that anybody has been able to correlate. People had talked about soy. They've talked about fiber. They've talked about all kinds of things. And no one's been able to replicate in a laboratory setting. They can't feed a certain food. They can't run a certain way. People have talked about Azithromycin or Reglan to increase the speed at which the stomach empties. People have tried all kinds of things, because it is such a devastating disease. It's not that the veterinary community hasn't been attentive to this.

Laura Reeves:

Right.

Dr. Marty Greer:

It's just no one has been able to replicate it in a laboratory setting. So no one's been able to study it in that lab setting. These are all clinical cases that happen in the real world. So unfortunately, we just don't have that information. I wish I could tell you that there was one particular food, or one magic formula of something that we could use, but I don't believe anybody can help us say that they can nail it down, other than feed two meals a day, feed two meals a day, or you could feed three meals a day.

Laura Reeves:

I feed two meals a day. And I do all this stuff. They all get water. They all sit for an hour after they run and two hours after they eat. I mean, I am that person. It's no question in my mind. People don't understand why I manage my kennel the way I do. And I'm like, "25 years of showing Akitas, and wolfhounds, and wirehairs, yeah, this is why we do it this way."

Dr. Marty Greer:

Yep, for sure.

Laura Reeves:

So other than it's emergency, go now, tack prophylactically if you know you have a genetic predisposition, what else are we forgetting? Gas- X everywhere.

Dr. Marty Greer:

Yep. And take a first aid class.

Laura Reeves:

Yeah, that's a good one.

Dr. Marty Greer:

Not just for knowing how to pass a stomach tube, but take a first aid class from a veterinary professional. There are classes out there. They're probably even taught online. I don't know. Maybe they're not, but take a first aid class and learn what supplies you should have, how you should use them, and just use some good, common sense. It's a great idea to have that first aid kit in a tackle box, or a backpack, or, some small, portable device that you have that you can carry with you. I've got a great list of things people should have, but just having them doesn't mean you know how to use them, or that they're current and not expired medications. So take a first aid class and learn how to do this. Maybe that's what we should do is teach an online class. You could do a Zoom-

Laura Reeves:

I think we're going to do that, Marty.

Dr. Marty Greer:

Yeah.

Laura Reeves:

I think we're going to. Okay.

Dr. Marty Greer:

They're going to have their supplies.

Laura Reeves:

Marty and I are going to do this.

Dr. Marty Greer:

Yeah, all put together.

Laura Reeves:

I love it. I love it. Let's plan it. Okay. So that is spectacular. Thank you very much, Marty. I am super excited about our new first aid class we're now planning. And I will look forward to talking to you again soon on more topics.

Dr. Marty Greer:

Sounds great. Thank you.

As always, if you have any questions or input, we'd love to hear from you. The show notes and links to resources on today's topic are available Puredogtalk.com. Drop us a note in the comments or email to laura@puredogtalk.com. Remember guys, this podcast is for you. So if you want to know something, give me a holler. We'll do a podcast for you. If you wouldn't mind, you could help me out here. Take a couple minutes to visit iTunes and give us a review.

The Dog Show Superintendents Association is a proud supporter of Pure Dog Talk. Our dog show Superintendents are the hardworking people who make the dog show function. They are advocates for education and mentorship in the purebred dog fancy. So stop by the super's desk at your next show. Tell them how much you love Pure Dog Talk and give them a shout out for their support. That's all for today. Thank you for joining us on Pure Dog Talk.