#### All About Amputation for Greyhounds on Tripawd Talk Radio #128

**TRIPAWDS:** [00:00:33] Welcome back to Tripod Talk Radio. I'm Jim and today Renee is speaking with Dr. Nicole Moore, owner and veterinarian at Moor Vet Hospital in Franklin, Ohio and Certified Greyhound Lover.

Since she started practicing medicine, Dr. Moore has always held a special place in her heart for greyhound rescues. She provides all the vet care needed as they come off the track and into retirement, so she's become quite an expert about caring for the breed. This includes many special challenges greyhounds face, from skin issues and pain management to cancer and amputation surgery.

In particular, most greys are prone to a particular bleeding syndrome that can cause serious complications with any major surgery. If you have a greyhound or have ever considered welcoming one into your home, you definitely want to keep listening. We are honored to have Dr. Moore explain these common challenges and offer guidance on what pet owners should know before, during and after surgery for their greyhounds.

**TRIPAWDS:** [00:01:32] Dr. Moore, we are so happy to have you here. Greyhounds are a topic that we talk about a lot at Tripawds, and yet we have never formally addressed the topic of how greyhounds are special when it comes to amputation surgery and other major surgeries. So I am so thankful that you're here today.

**DR. MOORE:** [00:01:51] Thank you. This is quite an honor to be here with you guys.

**TRIPAWDS:** [00:01:55] It. Thank you so much. Well, we heard from one of our members that you are just passionate about greyhounds and they're a big part of your life. I'd like to hear a little bit more about that. How did you fall in love with greyhounds? Was there a dog that that won you over? And what did you learn from from these particular dogs early on?

**DR. MOORE:** [00:02:16] Yeah, sure. so I fell in love. Gosh, it was probably close to close to 20 years ago, I think. and I was working at a vet office as a vet assistant, and a

couple greyhounds kind of strolled through the door on me, and I quickly fell in love with their sweet nature and personality. and at that point, I didn't know a lot about them. I was a vet assistant. I was starting to work my way through college and later, I'd become a vet. But my first couple of greyhounds I had really taught me a lot about the breed and got me interested in knowing more about them because there's a lot of idiosyncrasies with them that you know aren't with other breeds. There wasn't really that particular dog that caught my eye, but I adopted my first one through (unclear). and at that time it was kind of like they wanted to make sure they got the right dog to you. So we weren't necessarily choosing our own greyhound, they kind of looked through different dogs kind of listened to what we were looking for and found one. And his his name was Hemi. His race name was Mental Lee.

**DR. MOORE:** [00:03:34] So it made me a little bit nervous to have this mental coming to me. But no, he was great. it took a while for the transition with him. We had a little Italian greyhound at the time, too named Moose. And he did really great with Moose you know? And that's the thing with greyhounds, we never know if they're going to be small dogs safe or cats safe. because they have the high prey drive. But he did great. And then shortly after I got him, I think it was maybe four months later, I got a female named Nova. her prey drive was a little bit higher. So my little Moose kind of ran for his life. at first, but they were a great little trio. they were awesome. Really great. and, I've had I've had quite a few greyhounds. I've had Hemi Nova, Payton, Giovanni and Chase. So those are all my greyhounds that I've had and they're all special. But, Giovanni, right now, he is my heart and soul dog. I don't think I'll ever get another dog like him. but he's my special boy. Very close to my heart.

**TRIPAWDS:** [00:04:49] Oh, and now, have you ever had to go through any kind of major surgeries with your greys, or did you? I did you come to understand their needs later with other greyhounds.

**DR. MOORE:** [00:05:00] So, with my with my first greyhounds, both of them actually ended up passing away from osteosarcoma, which we know is a really high prevalence in greyhounds where at statistically we're looking at 25 to 30% of greyhounds, end up with bone cancer. SO that's a really high percentage. And that's the biggest reason why we have to do leg amputations in them.

**DR. MOORE:** [00:05:27] So, Nova, she was one that I did a leg amputation on and did chemotherapy and things like that. And boy, did I learn a lot. with her going through that. I wasn't a veterinarian at that point. I was still learning everything I needed to know. And her going through that surgery, I think is what opened my eyes to a lot of the crazy differences with greyhounds and the differences with surgery and medications and blood work parameters. And all of those changes that you don't see with other breeds of dogs.

**TRIPAWDS:** [00:06:05] Wow. Talk about getting thrown into the fire. I'm so sorry you had to go through that. Once is bad enough, but twice. Jeez. now, this is a topic that we wanted to talk about because last year we. Well, this year we had two greyhounds almost within the same month, have some serious complications after surgery because, their vet and the, the pet parent just didn't know how how they're so special when it comes to amputation. So can you explain to us what are some things that people pet parents should know before, during, and after surgery that they may be able to convey to their veterinarian about their concerns?

**DR. MOORE:** [00:06:51] Yeah. So when we have a greyhound that maybe has a reason for an amputation, or even maybe just a general, bigger major procedure, greyhounds, have a bleeding syndrome that we don't see in other breeds of dogs. We don't really have all the information on really why it happens, and which dog it's going to happen to.

**DR. MOORE:** [00:07:18] So there's not necessarily any specific testing that is can be done to tell us, "Is this dog going to be a bleeder or not?" Generally when we have these major procedures done, we start these greyhounds on a drug called aminocaproic acid, and that is to help with their bleeding syndrome that they have to help minimize it.

**DR. MOORE:** [00:07:41] We very rarely see that it actually stops it from happening because they're going to have this condition. We still usually will see the bruising happen. And that's that's the thing that we see with around the incision site. So you can have the incision and some of the the mild bleeders we call them may have bruising that goes out maybe a few inches from the incision.

**DR. MOORE:** [00:08:08] It gets really, really dark purple, color within 1 to 5 days after surgery. It can happen for that length of time. We have some that are moderate bleeders, and that may extend further out. Maybe if it's a hind leg amputation, we could see that bleeding syndrome go further, maybe towards the abdomen, even, through the skin.

**DR. MOORE:** [00:08:34] And then some of the severe bleeders are going to bruise, maybe all the way up their entire body, almost reaching their chest and neck area. And some of the severe ones, we can actually see anemia happen, so their gum color can get pale. We can see, bleeding, like, discharge happening from the incision site. There are some of these dogs that are having really severe complications with it could require blood transfusions and things like that. The aminocaproic acid is there to help really minimize what's going to happen. And unfortunately, sometimes it can actually be hard to get that drug specifically.

**TRIPAWDS:** [00:09:19] Is this is this one of those drugs that is also used for people as well?

**DR. MOORE:** [00:09:24] Yeah. So the people versions called Amicar. It's very expensive and some pharmacies don't even have it or they don't order it either. So I had a patient recently that I was I had run out of my compounded version of it, and I was trying to get pharmacies locally to see if I could get any of it, and I couldn't find it anywhere.

**DR. MOORE:** [00:09:47] And then my compounding pharmacy said that they weren't sure if they could get it here in time. And I'm sitting here like on the edge of my seat just waiting to see if I'm going to get the medication, but I usually keep it in stock because I have such a high volume of greyhounds come through here, just knowing that I'm going to use it on somebody. But yeah, it's challenging to get.

**TRIPAWDS:** [00:10:07] Oh, that is so scary. Especially if you have a dog who's in a lot of pain or if they need the surgery right now. So what I'm hearing is that this is it's a preventive, but it's not guaranteed to work.

**DR. MOORE:** [00:10:22] Most of the cases, if we see a Greyhound and we start them on it proactively, we rarely see that there's going to be any major issues following surgery with it. If we have a dog and they're going to be a greyhound bleeder and they've not had the medication, we can see that it can be very severe. And those are the ones that maybe we have pretty significant complications from maybe blood transfusions are needed and things like that.

**TRIPAWDS:** [00:10:53] Now, how how would somebody know if the bruising is normal or not? I mean, most dogs do get some level of bruising after amputation, but what makes it unusual? What should people keep an eye out for?

**DR. MOORE:** [00:11:08] I've even had some of my greyhounds that they'll bruise all the way from their back leg up towards like the chest area. And as long as they're eating and drinking and they're still getting up and they're moving around and every other way of recovery seems fine, their gum color is okay. We're not having major seeping from the incision site. Then those are ones I say just monitor, make sure that they're doing all of their normal things and we should progress fine.

**DR. MOORE:** [00:11:37] Usually by day 5 or 6, we're starting to see that bruising improve. It's starting to go away and we're on the way to recovery at that point. But the ones that are having the significant bruising, we're having a lot of discharge out of the incision. We're looking at their gum color and if it's more pale than it should be, it's not a pretty healthy pink. They're really not eating great. We're having kind of just downward signs. Then those are the ones that should definitely come back and be evaluated.

**DR. MOORE:** [00:12:12] Have a blood check done. Look at the CBC, count at their red blood cells, platelets, all of that to make sure things are at least stable. That's always a conversation that we have to have with our greyhound owners. I do expect that there's going to be bruising, but I have them send me photos through email, usually daily so I can keep an eye on it. They're updating me pretty constantly on, you know. Are they eating? Drinking? Are they getting up? Are they moving around generally? Are they seeming like they're feeling okay? As long as everything's trending in a positive way, we just watch that bruising and make sure we're not having a lot of that discharge at the incision site.

**TRIPAWDS:** [00:12:53] Okay, now the color changes that a bruise goes through. Can you describe that?

**DR. MOORE:** [00:13:00] It starts out usually kind of the pinkish into reddish. And in these greyhounds I usually don't really see because in a human bruise you're going to see like the bruise happen. And then as it's actually getting better, you see it turn like bluish and then almost like a yellowish as it's improving.

**DR. MOORE:** [00:13:27] In these greyhounds, when we see improvement of the bruising, we usually just see it slowly kind of tracing back to like where the incision site is. We don't go through that blue yellow phase. Generally we are kind of like the pinkish red. And in some cases the skin will be like really, really, really dark purple.

**DR. MOORE:** [00:13:50] That's another thing with the greyhounds, they have such thin skin. I think that's why some of this bruising to some extent gets the way that it is because of the thin layering of their skin. and they can get pressure necrosis a little bit easier. So if we have some fluid that's built up around the incision site, if there's a lot of pressure on their skin, we can get a necrosis area where the skin actually dies off in that spot and the fluid releases from it.

TRIPAWDS: [00:14:20] That would be like a seroma?

**DR. MOORE:** [00:14:25] Yeah. So you can get a seroma underneath the incision site and some of these cases, and you'll see a little hole form and the fluid release and generally those heal up. Sometimes we have to go back in and just trim the skin out and restitch and clean it up. But we do see those complications fairly commonly in greyhounds, I would say, because of how thin their skin is, especially in the hind limb area when we're doing a limb amputation there.

**TRIPAWDS:** [00:14:53] So if somebody does spot a seroma on their their dog, what are some things they can do to. To care for it?

**DR. MOORE:** [00:15:01] We will oftentimes after surgery try to have the clients do icing of the area post-op. And then if we start to have these seromas form, we can go into more of the warm compresses at that point. Depending on the size of seroma, a lot of

times the body will reabsorb that fluid back. But if we have a large seroma, sometimes I'll actually have them bring them back in so I can try to drain the fluid out to help relieve some of the pressure in the area.

**TRIPAWDS:** [00:15:38] S seroma is basically just a fluid buildup. And it's my understanding that it should look more pink than dark red like blood.

**DR. MOORE:** [00:15:48] Yes. So it's going to be a fluid pocket that's "Serosanguineous." It's usually like a blood-tinged color that's pink, and that's usually the type of fluid that we're kind of seeing come out of the incision on some of these greyhounds.

**DR. MOORE:** [00:16:03] If we're getting, like, frank blood coming out (bright red blood), that's when we're concerned that there's a major bleed that's maybe happening from the actual surgery site. Because all that muscling the greyhounds, especially, we have so much muscle. And when we're cutting through that muscle with the amputation, there's lots of little micro bleeders that just have to seal off on their own.

**DR. MOORE:** [00:16:26] It's not uncommon to have some of that frank blood discharge in the immediate post op phase. And then it should turn to that serous serosanguineous type of fluid from there. There are some vets that have the capability of doing this procedure through and electrocautery machine. It's called a ligature machine, and that's what I have at my practice to use, because we have less bleeding. We have more controlled surgery. You can usually get through the surgery a little bit faster and I feel like they heal and recover faster. We have less fluid build-up and things like that happens. I love that machine. I basically bought it just to do amputations and splenectomies and things like that.

**DR. MOORE:** [00:17:13] But for some of our practices that don't have that capability, they're using scalpel blades to cut through muscle. And when you're doing that you're not able to seal off any of those micro bleeders. The machine I have is electrocautery. So when we're cutting through the muscle, it's almost immediately cutting through and cauterizing all those little bleeders. So we have a very minimal blood loss, and I feel like they do a little bit better in recovery from there.

**TRIPAWDS:** [00:17:44] TThat leads me to my next question, which is, how can somebody know if their veterinarian has equipment like this and the experience with amputation and greyhounds.

**DR. MOORE:** [00:17:56] Yeah. So, obviously you don't want to pounce into an office and make somebody feel bad by, saying "Hey, how many greyhounds do you see? Hey have you done this surgery before?" But to some extent, you just have to ask those questions. And being a vet myself there are other breeds out there that have idiosyncrasies, too, that maybe I'm not aware of.

**DR. MOORE:** [00:18:21] We have so much to learn in this field that we cannot possibly know every single thing specifically to each breed. And we all, as a veterinary community, have to understand that. And it is okay to go into a vet office and one, (ask) "Are you comfortable treating greyhounds?" They are a little bit different in their blood work and, different changes. Sometimes even asking, "Oh, have you heard of Dr. Cuoto? He's one of our greyhound gurus that does a ton of research and that's how I learned. Almost all of the information I know about greyhounds is through him. So asking those questions is okay.

**DR. MOORE:** [00:19:03] I think you can ask in a nice way. Don't be, rude about it, but just ask, "Do you see a lot of greyhounds? Have you done an amputation on a greyhound before? Are you aware of, the bleeding disorder that they can have? Do you have the medication on hand to give when you do the amputation? What type of equipment do you have to use? Are you worried about blood loss? Those kinds of things.

**DR. MOORE:** [00:19:34] I do also, when I have owners asking because sometimes I'll have owners that are moving away to another state and they're like, "Hey, do you know of any Greyhound vets in Florida?" And I'm like, "Oh, I don't know anyone offhand. I don't know the area that you're going to. What I always recommend people do is get on a local Facebook page that are Greyhound related and just make a post. "Hey, I'm new to the area. Where do you guys take your greyhounds for vet care in this area?"

**DR. MOORE:** [00:20:05] And you're going to get an overwhelming amount of people probably saying two or three different vet names. You'll know that, "Okay, I've, I have

500 people on this Greyhound group, and I'm getting a lot of people saying that they take their greyhounds to this place. So they probably see a lot of greyhounds, and they're probably comfortable treating them if they're seeing that many. And then at your first appointment, just have that quick conversation. "Hey, are you comfortable doing surgery on greyhounds? Do you do you know the differences in their blood work?

**DR. MOORE:** [00:20:38] Our greyhounds, they have higher kidney counts than other species do, lower neutrophil levels, lower platelet levels, thyroid levels, low red blood cells are high. We have such a big difference in their blood counts than other breeds of dogs. We commonly get vets diagnosing and kidney disease or platelet issue, or hypothyroidism. Like there's so many things that can go wrong, even just in regular vet care with them, because they're simply just not familiar with the normal ranges in a Greyhound.

**DR. MOORE:** [00:21:16] And Dr. Cuoto has actually come out with reference ranges for blood work, levels in greyhounds. He has these little cards that he'll hand out to people and you can, I think, maybe order them from his website or something to give to your vet. But there are a lot of differences and it is important to get at a clinic that is familiar with them. And I tell people to just in general, you have to find a vet that you're comfortable with. It's like being in a relationship. You need to be at a place that you feel like you can trust, and they're going to sit down and talk to you about everything and spend the time that's needed.

**DR. MOORE:** [00:21:58] And if you don't get that good vibe, just move on to another place. it's your pet. You need to be proactive for them. and.

**TRIPAWDS:** [00:22:08] What if you're in an emergency situation, like one of our members? Her her greyhound had a pathological fracture. She had to take her to the nearest ER. They did the surgery, and then everything went downhill. I mean, how do you know that your grey is going to get the kind of care they need in an emergency like that?

**DR. MOORE:** [00:22:28] Yeah. And it's hard to some extent. you you have to trust the vets to do what they can in an emergency situation. But still, in an emergency situation, you can be proactive for your pet. And if they're not aware of the aminocaproic acid or

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they're not aware of the blood work differences, like it's okay to have that conversation, say, "Hey, I'm not sure if you see a lot of greyhounds and if you're familiar with their differences. I do have some things written down here, if you don't mind looking at it, just so we can make sure that, Joey's getting all the care that he needs, in the right way."

**DR. MOORE:** [00:23:09] Greyhound owners can be proactive in a positive way for their pet with a veterinarian, even in an emergency situation. It's just they have to have the knowledge themselves to be able to do that. And that's where I think sometimes we have that lack is even the owners might not be aware of, of certain things.

**TRIPAWDS:** [00:23:32] And are there any books, websites that you would recommend somebody who's new to having greyhounds, go through?

**DR. MOORE:** [00:23:41] There is Dr. Cuoto. He does have a pretty thorough website with greyhounds. Like greyhound differences in blood work and the bleeding syndrome information and things like that. There's a lot of useful information there about their differences.

**DR. MOORE:** [00:24:05] There there's the, what are the dummy books? The great Greyhound for Dummies books that have some of the information in it. I mean, it's not going to be as detailed. but also, when you're adopting, even a retired racing greyhound, a lot of times, those adoption groups, are going to have a lot of information for you. It's just making sure that you're actually reading through everything. And then they typically have a veterinarian that they recommend, that you go to because they're the ones maybe vetting them coming off of the racetrack and things like that.

**DR. MOORE:** [00:24:40] I have several greyhound groups that bring their their dogs to me coming off the track, and I'll spay and neuter them, clean their teeth, vaccinate them, get them all ready for their forever homes. And then a lot of those people adopting will still come back to me at that point and then at their first visit, I'm sitting down and we're going over the Greyhound specific things.

**Speaker10:** [00:25:04] We've got a lot of hookworm issues. We've got limping. We've got the osteosarcoma for limping, we've got the corns and the paw pads for limping. I go over all the blood work stuff. So that first visit, when they come in, it's kind of like a, a

quick just go over of these are the highlights of greyhounds. Their thin skin; if they're running around the yard, they go across the branch and they're probably going to have to come in to get stitches. They get into some little scuffle, with a cat or a small dog, they'll probably have a scrape that might need stitches. They're just a really unique little breed, and they have my heart. They've always had my heart.

**TRIPAWDS:** [00:25:42] Do Italian greyhounds have the same risk when it comes to amputation surgery and bruising and things?

**DR. MOORE:** [00:25:51] We don't see that we have a bleeding syndrome in the Italian greyhounds. And we don't have the prevalence of bone cancer in Italian greyhounds, either. So when we're thinking about amputations in an Italian greyhound, it would be because we have such a severe fracture of a leg that we don't think it can be repaired appropriately why we would need to do a limb amputation on them.

**DR. MOORE:** [00:26:18] They don't have a lot of the blood work changes aren't as significant as in the greyhounds. But there are other sighthounds out there, the Borzoi, the Irish Wolfhounds, those sighthounds. We're going to see similar changes with some of those blood panels that are pretty close to greyhounds. I think even the Irish Wolfhounds, in the Borzois can also have some of the bleeding syndrome happen in them. But we don't generally see that with the Italian greyhounds.

**TRIPAWDS:** [00:26:56] Okay, okay. Good to know. Well, we we are almost out of time. I just have one more question in regards to surgery. Yeah. What about pain control? Do greyhounds have any kind of sensitivities that other dogs don't when it comes to the typical pain medications that they go home with?

**DR. MOORE:** [00:27:12] I kind of reach for the same drugs for my greyhounds that maybe I won't use on other breeds of dogs. I use a lot of butorphanol for just, like, mild, pain control. But when I have limb amputations, I will use fentanyl patches on them. That's a really potent pain medication. and I have them come in the night before to have the patch put on, because it can take up to 12 hours for it to be fully effective. It's transdermally absorbed. But it lasts about four days/ So they come in the night before and then by the time they're getting here the next morning for surgery, it's in full swing and we see that pain is very well controlled.

**DR. MOORE:** [00:27:55] Then during surgery, we do local anesthetic as well. Whenever we're cutting the nerves, we'll inject that with bupivacaine. and then we'll also soak the muscles when we're closing with some of that local numbing as well, just to help in the short time frame. Of course, that wears off after so long. but it can help with some of that immediate pain.

**DR. MOORE:** [00:28:17] I don't really love hydromorphone in greyhounds. I feel like they get really weird and they just don't do great with it with that medication, so I usually steer clear of that one. It can make them really nauseous. And, I used it a few times and I just, I kind of steered away from that because they just didn't do great on it.

TRIPAWDS: [00:28:38] What do you typically send clients home with?

**DR. MOORE:** [00:28:41] So they'll have the fentanyl patch on. They'll have gabapentin. they'll also get anti-inflammatories, like carprofen or Rimadyl or something like that. I mean, that's kind of the mainstay of of care. Sometimes we'll have to do antibiotics if we have concern for maybe infection starting. We'll throw them on an antibiotic.

**DR. MOORE:** [00:29:03] But, when it comes to that post-op care at home, I try to make sure I really prep the owner. I'm not a 24-hour hospital here, so they do pick them up at our closing time, 530, and then care is on them after that at home.

**DR. MOORE:** [00:29:23] There is always the possibility of transferring to one of the 24 hour ER centers, where they could maybe keep them for a couple of days and do that initial care. I find most people are usually just taking them home and dealing with the care themselves just for cost purposes of it. But I, I try to prep them as much as I can.

**DR. MOORE:** [00:29:43] Those first few days are by far going to be the most stressful. They're going to see maybe some sleepless nights at first because you're watching him like a hawk. I try to get them to get, like, one of the circular X-pens to throw a real nice comfy bed in the center of it. So they've got some real good cushion to lay on.

**DR. MOORE:** [00:30:03] Make sure you're rotating them every couple hours so they're not laying on the same spot and getting pressure sores. Trying to get them up in a

standing position every few hours. trying to encourage walking. They can get some of the help me up harnesses, just so you've got some things to grab onto to help support their weight. They might not eat and drink really that great for the first couple days. That's pretty common.

**TRIPAWDS:** [00:30:33] For, for all dogs that we see when they come home and, and yeah, especially the first couple of nights are, are pretty rough. But I am just I'm so thrilled that there are Greyhound pet parents out there who get to work with you. I wish there were more of you out there. Can we clone you?

DR. MOORE: [00:30:51] I wish. I know I need to.

**TRIPAWDS:** [00:30:54] Well, we want to thank you for your time. I know how busy you are. And I certainly appreciate this. 30 minutes that you spent with us. is there anything that you'd like to add? Uh, any final thoughts?

**DR. MOORE:** [00:31:07] I don't think so. I think we were pretty good on everything, but thank you. I really appreciate you talking to me. and if anyone ever needs any information in the future, you can always get a get Ahold of me. And my clients know I'm really easy to reach by email if there's any questions that pop up.

**TRIPAWDS:** [00:31:25] You are so sweet. Thank you so much, Dr. Moore. We will we will let everybody know about you, and we'll share those links and information that you shared in our show notes. I hope you have a great rest of your day.

DR. MOORE: [00:31:37] Thank you. You too

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