

Pure Dog Talk 328 - Poopy Happens Puppy Diarrhea Causes and Treatments

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Laura Reeves:

Welcome to Pure Dog Talk, I am your host, Laura Reeves, and I am always grateful to our wonderful veterinary voice, Dr. Marty Greer, who is so gracious to talk to me at all hours of the day and night, after football games, you name it, man, she's amazing. So thank you.

Dr. Marty Greer:

It's only because my schedule is so bad.

Laura Reeves:

That's okay, that's okay. We all have that same schedule, that's what's terrifying about it, right?

Dr. Marty Greer:

It's the wonderful world of dogs.

Laura Reeves:

Absolutely. And the wonderful world of dogs, and are we ready for it? Poopy happens, right?

Dr. Marty Greer:

Indeed it does.

Laura Reeves:

And particularly, I wanted to talk about, and so much of what we do here on the podcast is based on, Laura had a bright idea about whatever, in this particular instance, I went through this with a litter of puppies just recently, and it triggered a thing that said, "We need to talk about this. This is something that not everyone has experienced this and not everyone has the incredible resources that I have at my fingertips." And so I want to share this with you guys, my listeners. So Marty, thank you so much for bringing your wisdom to us.

Dr. Marty Greer:

Oh, of course. No problem.

Laura Reeves:

Absolutely. So you have baby puppies and for any number of, I think there's 13 here on my list, reasons, baby puppies start having diarrhea and bad potty. And this is really dangerous in baby puppies, they can get dehydrated, they're not getting their nutrients, they're not growing, all of this. So let's break it down, let's talk poopy.

Dr. Marty Greer:

Okay.

Laura Reeves:

All right.

Dr. Marty Greer:

Yeah. So the danger is dehydration. It's secondary bacterial infections because the bacterial components of the GI tract can penetrate through and get into the system. Like you said, loss of weight gain, just a whole cycle of things start to happen with diarrhea. So it's not simple, it's not just a little bit of diarrhea, it really is a big deal. And the younger they are, the more serious it is.

Laura Reeves:

Correct. You have it listed in the things that cause diarrhea, I almost want to talk about it from a, okay, they're a couple days old, why are they having a diarrhea? They're a week old, why are they having a diarrhea? They're three weeks old, why are they having ... that is almost, because when we have puppies and they're going along and they're going along and all of a sudden you're like, "No."

Dr. Marty Greer:

Yeah, exactly. And I'll tell you, almost every single litter, either the puppies have diarrhea, the mom has diarrhea, they all have diarrhea. At any point during that first six to eight weeks, it's almost inevitable that there's going to be diarrhea. So it's really difficult. And I send home, after our C-sections and after females have their puppies, I just automatically send home a couple of items with people because I know they're going to need it and they look at me and go, "Really? I don't think I'm going to need that." And honestly, if they don't take a probiotic and they don't take home kaolin and pectin, it's a guarantee that they're going to regret it.

Laura Reeves:

They're going to come back.

Dr. Marty Greer:

Yeah. Or they'll end up someplace in the middle of the night and then it gets even more expensive.

Laura Reeves:

Okay. So let's break it down. So the first most common reason that baby puppies up to eight weeks old are going to have bad potty.

Dr. Marty Greer:

Oh gosh. I'm not sure I can nail it down to one particular reason, there's several that are pretty common. Overeating is certainly one relatively common cause, if the puppies are just overindulging, they may end up with diarrhea. Anytime that you do a diet change, which of course in the first two weeks you're not going to have, but anytime once you start into the weaning process at week three and four, a diet change is going to do it. A water change is going to do it. Stress is going to be a problem. There's bacterial and parasitic causes. Parasites are really common.

Laura Reeves:

Right. And I want to hit on that one hard.

Dr. Marty Greer:

Yeah. Most puppies, if their mother wasn't on an appropriate dewormer during her pregnancy, they're going to end up with parasites, even before the puppies are old enough to have adult parasites passing eggs in their stool to be diagnosed, you can already find parasites in the puppies intestines. So by two weeks of age, the puppies can have a pretty heavy parasite load, so it's really important we talk about this.

Laura Reeves:

Yeah. All right. Well, let's start with the easy one, which is overeating, which I personally don't tend to see that when they're nursing, I tend to see that when we start them on kibble of some shape, form or fashion or whatever solid food that we're moving to. And maybe you've got a little one that's like, "Oh, hallelujah, I can finally eat." And they just gorge themselves.

Dr. Marty Greer:

That's true. But sometimes we'll have bitches that just really lactate heavily and they have a small litter and so we'll end up with a problem of overeating. And when you have a small litter, one of two things happens, either the bitch doesn't produce enough milk, so you have to supplement because she's just not stimulated adequately to produce milk, or she's got enough to feed the neighborhood, and the small numbers of puppies that she has, are going to take full advantage of it. So they may be a singleton and there may be two or three in the litter and they're going to overeat. Frequently, that's fairly easy to diagnose because the diarrhea tends to be white in color, and it tends to be very hefty puppy for their age and their size.

Laura Reeves:

Right. We had one litter, wire haired pointers and there was the two little ones that we're always trying to get to eat. And the one, we called him Al the Tick, because he would eat and his little tummy would swell up, and he would look like a tick that was ready to pop.

Dr. Marty Greer:

Yeah. You will see that sometimes when they really do overindulge.

Laura Reeves:

And so then we have the weaning process. So everybody has their own weaning process, whether you're weaning to kibble, or weaning to raw, how you do it, all of these things have bearing. What are your suggestions about that transition? Do you talk about probiotics? Do you talk about plain yogurt? What are your recommendations?

Dr. Marty Greer:

I really like the probiotics better that are made for dogs because they specifically have bacterial components in it that a dog should have in their gut. So yogurt's okay, but it doesn't have some of the bifidobacteria and some of the other bacterial components that we really like to see in the dog's GI tract. So my preference is to use a good quality probiotic, and that's going to be one of three, that's going to be, Provable, which is Nutramax, I'm going to draw a blank on it, but it's vet something, and the third one is the Purina FortiFlora. And I just found out recently, and this is really terrible that I didn't know this before, that the Purina has a beef base to it, but it's all hydrolyzed protein. So even in a dog that might have an allergic problem with beef, because it's a hydrolyzed protein, they can tolerate it. So it tastes the best, it's one of the nicest.

Laura Reeves:

Yeah. I've used FortiFlora for almost every single litter when I start weaning. I just mixed the FortiFlora, dump some into the big tubs and it's not scientific, but it works. And then as you start to put, I know, I know, just breathe, but as you start to have individual bowls, then you can worry about giving them each their own dose. But just to get them started as they transition, I have found it to be super successful.

Dr. Marty Greer:

Right. It's great. The third one is Biome Vet probiotic.

Laura Reeves:

Yeah, there you go.

Dr. Marty Greer:

So we know those three are really good ones. And you want to make sure that you're checking the label, and if it's not on the label, that contact the company to ask them how many colony forming units, that's how many bacteria are present at the time that the product expires, not at the time that it hits the shelf, but at the time it expires, because a lot of times those products will deteriorate over the course of time that they're on the shelf. So like a vaccine, you don't want to use anything that's expired for a probiotic.

Laura Reeves:

That's a really good point. I like that one. Because we don't think about it, it's a little powder in a package, it can't go bad. Well, yes, it can actually. That's good. I like that. Good one.

Dr. Marty Greer:

And then if the numbers of bacteria are too low, then you don't get the full effect.

Laura Reeves:

Mm-hmm (affirmative). And dietary indiscretion, one would think that that's going to come in that eight week old puppy that just can't quit putting rocks in its mouth, right?

Dr. Marty Greer:

Right. That's the most common age that you're going to see it, is in the puppies that are weaned and out and about, not the ones that are still in the whelping box, not the ones that you really can control what's in their environment. But yeah, the leaves, the stick, the dead bird, the goose poop, you name it, if it's out there, your dog is going to find it. It's a guarantee that he who eats the fastest gets the mostest. So the faster you run towards the dog to take it out of their mouth, the faster they swallow, so that you are certainly not going to take away this new prized possession that they have.

Laura Reeves:

They actually learn at my house, I teach them because I have pea gravel, which pea gravel, in the scheme of things, even for baby puppies, they can easily manage to handle it, but I don't like them to eat it. So I teach them as baby puppies, "Come here and show me what you have." So I don't go after them, I sit and call them to me. And after a while they learn, and I just look at them and they spit it out.

Dr. Marty Greer:

That's pretty good training because that's hard to do. Obviously you don't have a retriever.

Laura Reeves:

No, I do. I have wire haired pointers, hello, they retrieve, but they know.

Dr. Marty Greer:

Yeah, but they're not Labradors.

Laura Reeves:

They're not Labradors. Labradors are special, anybody who has Labradors will tell you, any of you listeners who have Labradors understand, Labradors are what is it, the highest incidents of inappropriate things in their stomach surgeries.

Dr. Marty Greer:

Yes. So here's a little hint. If you have a Labrador and they eat bad things, get insurance when they're very young, because you will definitely benefit from that. It's several thousand dollars every time your dog eats something that has to go to surgery and they have to end up taking out bits and pieces of the dog. So it's a great idea to have that insurance.

Laura Reeves:

And can I say, because Trupanion is my favorite. Trupanion insurance is an excellent choice for those of us who are breeders. Here's your free add Trupanion. Those of us who are breeders, we can send our puppies home with it, it doesn't cost us a thing. And the minute that puppy leaves our house, it's covered and it is covered, and I've talked to the Trupanion people, they've paid \$10,000 on a puppy that went home on a breeder plan. They haven't even gotten money yet. You know what I'm saying? It's just amazing to me.

Dr. Marty Greer:

Yeah. So you definitely want to be checking out the different insurance companies and what kind of coverage you can get. So those are really great tips for you to have if you've got one of those dogs, that's a tendency to just be a garbage disposal and eats everything that they can get their mouths on.

Laura Reeves:

Absolutely. Clumpers are another one.

Dr. Marty Greer:

Yeah, we've seen broken glass and razorblades. If it can go down, they figure out a way to do it. So it can be scary.

Laura Reeves:

And in the scheme of razorblades, water change and stress are pretty minimal.

Dr. Marty Greer:

Yeah, matter of fact, water change may give you some diarrhea, but I don't think too many dogs are going to get really sick from it. And of course, stress, anytime that the dog is stressed out, especially when they're going to a boarding kennel or someplace that they've never been, it's a good idea to take along your own food, take on your own water and include your probiotics at that point as well, because stress is going to definitely be a trigger for those dogs to develop diarrhea.

Laura Reeves:

Right. And we're getting to the ones that I think are the most scary, the most dangerous, bacterial, parasitic and viral. Those are the ones that for me, are terrifying. And they each have their own odor, their own color. You know what I'm saying? I mean, this is weird, we're having a poopy happens discussion, I hope y'all are not eating dinner, but this is real.

Dr. Marty Greer:

Right. And especially parvovirus, there's a special odor that goes with parvovirus. I learned that my first year out of vet school and actually before I got out in 1979, parvo started to break and I graduated in '81 and we would have dogs that came in in kidney failure or came into the hospital, hit by a car. And because we didn't have vaccine, because we didn't have protection, we would have these dogs that would come in completely unrelated to anything, and adult dogs would get parvovirus and die. And in our rotation, in our small animal clinic, if your patient died under your care, you flunked the rotation. So it didn't matter that your dog died from parvo, even though it had a broken leg, you were responsible for that dogs death. So it was a really brutal time to be in practice, there was no vaccine, there was nothing we could do for these dogs and it was really horrible.

Laura Reeves:

That was the time that my family got into purebred dogs, and the very first purebred dog that we got was an English setter and she came from a parvo litter. It was bad.

Dr. Marty Greer:

It's disturbing. And I've actually had one of my own dogs that has died of parvo because of the timing of the vaccine and the timing of the transport of the dog. So it's still out there, it still happens. It's most common to see in either dogs that

aren't vaccinated or in the Rottweiler, Doberman and pitbull terrier groups of dogs. But we do still see it in other breeds as well and it can really sneak up on you and really be terrifying. So one of the things I learned and I'm going to share with your readers and listeners here, that they need to take a look at, is if they live in the country, they need to be aware that raccoons have latrines, and I didn't know this until recently, raccoons have latrines and they will travel a long distance over ground to get to that latrine.

And it harbors parvo, it harbors leptospirosis, and it harbors parasites as well, like [inaudible 00:14:55]. So it's a really nasty thing. So you want to make sure if you live in the country or have someplace that you've got raccoons around, that you walk the property, you take out a flashlight, you go out, you investigate it. The Center for Disease Control has an entire webpage on how to find and destroy and disinfect a raccoon latrine. So it's something that people need to be aware of if they're having groups of dogs or if they're losing dogs and they can't figure out where parvo is coming from, this is probably the source. So it's important-

Laura Reeves:

That is new information to me as well. Interesting.

Dr. Marty Greer:

Yeah. So we'll make sure that that gets-

Laura Reeves:

A link, yeah. Great.

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

I'm so excited and I just can't hide it. I know I promised I was never going to sing again, but I'm saying our new audio book is available now. Woop. Pure Dog Talk, how to stack your dog and other important talks, is a two CD set featuring early mentoring episodes from the podcast, tips and previously unrecorded pep talks. This is a power packed opportunity for folks who don't want to search our exhaustive 260 some odd episode library, for just the topic they're looking for. This two hour series is a great resource for breeders and mentors, 4H leaders, anybody that's looking for a straight line trajectory from what kind of dog should I get, to raising a show dog, how to stack and move with your dog, to counting championship points for your new dog.

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Laura Reeves:

So bacterial. So more common, probably. I mean, realistically parvo happens and we all know somebody, I'm sure, that has dealt with it and has its own color and odor. But bacterial and parasitic, probably more common, would you say?

Dr. Marty Greer:

Yeah, parasites are really common. It's estimated that about 95% of puppies have parasites at some point. So if you have a litter of puppies and the bitch wasn't on a dewormer during her pregnancy, and I'll talk about that in a second, then the puppy should start to be dewormed at two weeks. So as soon as their eyes open at two weeks, so at two, four, six, and eight weeks, they should be dewormed with a broad spectrum dewormer. That can be, Pyrantel, Pamoate, it can be Panacur, but it's really important that we get those dogs on dewormers when they're young. Because like I said at the beginning, they can have adult parasites in their intestinal tract by the time they're two weeks old, before you can even start to see the worms pass eggs because the parasites have to be three weeks old to pass the eggs that we can see on the stool sample. So you can have very, very young puppies with heavy parasite loads.

Hookworms can cause significant anemia to the point that we can lose puppies to anemia. Whipworms can cause significant problems. Of course, then there's giardia and coccidia, and cryptosporidium. There's a whole wealth of really nasty things. And a lot of these are contagious to humans as well, so we need to be careful that we're managing these

puppies, we can't be placing puppies in homes with families that may have children, may have people in the family that are elderly or immunocompromised in some way, that they could end up picking up a parasite from the puppy and ending up with some health problems associated.

So the coolest thing that you can do is from the fifth week of the pregnancy, so three weeks before the bitch is due to whelp, through the first two weeks of lactation, so for five straight weeks, 35 wonderful days, you can put the bitch on Panacur fenbendazole, once a day for that five week period of time. And by doing that, you interrupt the life cycle of the parasite. So she will not have puppies born with roundworms or hookworms. It's really cool. So if you've been used to seeing puppies pass worms when you start to deworm them at two weeks of age, this is a way that you can keep that from happening.

Laura Reeves:

Okay. So talk to us more about that because I, and many of us in my genre, time of life, have always heard you can't put any chemicals, don't put any chemicals in a pregnant bitch, don't worm a pregnant bitch, don't vaccinate a pregnant bitch. Any of those things, just like Holy grail to the uterus.

Dr. Marty Greer:

Right, right. So the rule is don't put anything into the pregnant bitch that's not going to improve the health of her or her puppies. And this follows that rule, it will definitely improve the health of the puppy. So like I said, instead of having puppies that are born with parasites already in their intestines, you can interrupt that. Now you can deworm the bitch until hell freezes over and have negative stool samples and still end up with puppies born with parasites because, and this is confusing to people because it doesn't make a lot of sense to them, but if the bitch had a parasite when she was a younger dog, those will insist in the muscles, they will migrate through the bloodstream, migrate into the muscles, insist just the way that we used to talk about trichinosis and tigs, and then the stress of pregnancy and the stress of lactation, reactivates the migration so that they're in the bloodstream of the bitch and that's how they pass through the placenta, into the puppies and how they pass through the milk and into the puppies.

So the only way that you can interrupt that life cycle is with a five week course of Panacur, fenbendazole, safeguard, whatever product you want to call it, it's often fenbendazole.

Laura Reeves:

Okay. That's the important thing that I need people to hear and remember, the bitch passes parasites, worms, to her puppies in the placenta and in the milk. So if the puppies are still nursing, they still are receiving worms from the mother, eggs.

Dr. Marty Greer:

Right, right. The actual parasite, the larval form of the parasite, yes. And then of course she turns around and licks up the stool and so then she reingests the parasite eggs, so then the cycle starts over. It's a really great system if you're a parasite, because you don't actually kill the patient, but you make them sick. And it's not a cool thing if you're a dog owner. I have pulled roundworms out of the washing machine, they've gone through the laundry. It's unpleasant, let me tell you, it's unpleasant to find those in your wash. So don't do it.

Laura Reeves:

No, no. And like I said, having just lived through, long story, but anyway, having just lived through this with a bitch that I was whelping for someone else that was not mine, who was not on my personal worming protocol. And I've got baby puppies that break at three and a half weeks with bloody diarrhea, sort of as I said, the trigger for this entire podcast, going, "I know there's something wrong." And remembering reading about hair coat that looked wrong and turned up at the ends that meant hookworms and all of these things, I'm looking at these puppies going, "Oh my God." Talk to us, if you can, as a veterinarian, a little bit about the horrors of hookworms and some of these parasites on your property.

Dr. Marty Greer:

Right. And once you've got them, they're there to stay, you can't eliminate them. Flame throwers don't take care of them.

Laura Reeves:

Girl, I've tried. I thought about it, I really considered it. It's fire season here.

Dr. Marty Greer:

Yeah. Bad choice. We used to have chemicals that we could put on the soil that would kill hookworm eggs, but those went away a long time ago because it was an organophosphate and it was bad for our water supply and bad for us. So those are no longer products that are on the market. And there's very little you can do to kill those parasites, even the winter in Wisconsin does not kill these parasites when they're in the soil. So it's a thing once you have it on your property, you're always going to have it. And things like giardia and coccidia, it's almost to the point we expect to see those in puppies. It's almost impossible to have puppies without that because they are just that prevalent. And it's very frustrating for people that are trying to raise healthy dogs, that the first thing they do is take the puppy to the vet and boom, they show up with either giardia on the stool sample, giardia antigen on the step test or coccidia on the stool sample.

Laura Reeves:

And how do we treat giardia and coccidia, for those of us who are listening, who might not know the answer to that question?

Dr. Marty Greer:

Sure. And giardia will respond well to five days of fenbendazole, so the same product that we're using for our bitches. Coccidia responds pretty well to Albon. Albon doesn't kill it, but it knocks it down. I personally prefer to use those products. I don't like using ponazuril and toltrazuril and some of those products that are made for horses. The problem being that it's pretty difficult to take a tube of dewormer that's designed for a patient that weighs 1500 pounds, and estimate how much you need to give to a one pound puppy. So I'm personally not a fan of those products because I think they're dangerous and the opportunities to have missed doses occur. And metronidazole, people want to use metronidazole for everything, but again, that's not something that we should be reaching for during pregnancy, when the puppies are really young. It's easy to develop metronidazole toxicities, so we have to be really cautious with that as well. So fenbendazole and Albon are the two drugs that we tend to use the most commonly in our practice.

Laura Reeves:

Good, good, good. On the viral we touched on parvo, I think we did pretty well on that. Corona and distemper. I mean, Corona, we see, and I know it's not part of my core vaccine, distemper, of course, is, but talk to us about that Corona, distemper, some of those things.

Dr. Marty Greer:

Sure. And distemper should be in everybody's vaccination protocol. We rarely see distemper in the northern tier states, it still shows up on the southern tier from time to time in certain situations. And we do vaccinate routinely for it, and unless you've done a nomogram on your bitch, to know exactly when you want to specifically vaccinate your puppies, the general vaccinations should start between six and eight weeks, with distemper, adenovirus, parainfluenza, and parvo repeated every four weeks until they get to be 16 to 18 weeks old. So we do recommend strongly that you vaccinate for distemper and parvo. Corona, we don't vaccinate for in my practice. In certain commercial breeder settings where you have Corona, it might still be a good idea, but in general, it's not necessary. The standing line that I hear from Dr. Schultz, the vaccination guru from Wisconsin, is Corona is a vaccine looking for a disease.

Laura Reeves:

That's how I felt about it, that's why I was curious. Okay.

Dr. Marty Greer:

Yeah. So it's a rare situation that I would recommend Corona to be in the vaccination protocol, but distemper and parvo, absolutely, hands down need to be vaccinated for every three to four weeks, starting in around six to eight weeks of age.

Laura Reeves:

Okay. Okay. So we've covered why we have bad potty in our puppies and there's a few other ones that are a little more esoteric.

Dr. Marty Greer:

Right, not so common.

Laura Reeves:

Right. A food sensitivity or any of these kind of things. Diagnosis is pretty easy, take the poopy and look at it under a microscope, yes?

Dr. Marty Greer:

That's step one. And then step two is either going to be the step test that gets done in the veterinary clinic or sending the sample out to a diagnostic lab that can also do a PCR or an Eliza test, looking for the antigen, for the protein of the parasite. Because sometimes they can be very difficult to find with the microscope, but they are easier to find with PCR or Eliza testing. And of course, then there's the obvious, visual inspection, looking at the stool. And I will frequently have people that come in with a stool sample and there are tapeworms in the stool sample, but there's no Eliza test for it, there's no PCR test for it. And on flotation, the tapeworm parasite segments are too heavy to float. And typically the other things that we see on stool samples, are going to be put in a salt solution centrifuge and then looked at on a flotation.

So we have to look at the stool and see if there's any evidence of a tapeworm, because it's really upsetting to owners if they come in, they bring us a sample, they've paid the money for it and we give them a result that there's no parasite when they know full well that they saw tapeworm segments.

Laura Reeves:

This is a really great point, and I want to put a marker here, as they say. Well, because this litter that I'm describing to you, the situation that I just went through, I had three stool samples in and every single one of them came back clear for everything. And yet, as they went on into their homes and this sort of thing, they were positive for hookworm, they were positive for roundworm. So not every stool sample gives you an accurate reading. I mean, talk to us about that, speak to that a little bit.

Dr. Marty Greer:

Right. And that happens more often than we'd like to admit. It can be that either the parasites are too young to have the eggs, it can be that they're difficult to see. Giardia can be really tough to see on a stool sample, and cryptosporidium can be really hard to see. Coccidia, you can pretty commonly find it, but it's not always easy to tell if it's the dog coccidia, or if it's just something passing through the GI tract, like a rabbit dropping that they picked up and it just barely went through the gut and it looks like it might be a parasite, but it isn't always.

So that's why it's a great idea to have these stool samples sent out to a diagnostic lab where they do the Eliza tests, where they have people that spend their entire life sitting at a microscope, looking at these parasites, instead of your technician that's trying to grab lunch, run a stool sample, get ready for the next appointment, send home the surgery, it can be really difficult for accuracy on these stools. And it's really critical, like I said, because of the zoonotic potential for

these diseases, we don't want to miss anything, we don't want to miss diagnose or treat for something that we don't need or end up with some other weird parasite, like a stomach worm or a lung worm or something, which are very rare, but they do happen.

Laura Reeves:

Okay. That's really good. It's a frustration, because I'm using my own case study here, I'm looking at these puppies and I have 40 years of looking at puppies, I'm saying, "There's something wrong." And I am saying based on not experienced because I've never experienced hookworms, but based on education and knowledge and learning and reading and all those years in 4H and whatever, I think it's hookworms. And finally, I just said, "I don't care what the stool sample says, they're getting Panacur. That's just all there is."

Dr. Marty Greer:

Right. And it's always a good idea to be really cautious about it, so I would never tell you that it was a bad idea to be proactive about that condition, but it's really common to see these parasites. And when I've had people put their dogs on the five-week protocol with fenbendazole, I have had multiple breeders with a number of years of experience that you have, come in and they will walk in my door, throw their arms around me and say, "Dr. Greer, I have never had such healthy puppies in my 40 years. I can't believe I didn't do this before."

Laura Reeves:

I'm very excited because I have another litter bred, again, not a bitch that grew up on my property, so I expect she's in good shape and all the rest of it, but I don't know that for sure. And we're going with this, I am going to personally do a test drive on this. So I'm excited.

Dr. Marty Greer:

Well, good. We'll have a report.

Laura Reeves:

Absolutely. She's four weeks pregnant this Friday. So there you go. In a couple of weeks, we'll have a report on this. So what's the dosage and is it different than what you would do if you were doing the three day Panacur treatment?

Dr. Marty Greer:

It's still 50 milligrams per kilogram once a day for five weeks. And like I said, it's definitely an off-label use because it's labeled for three days in the dog. But there was a publication in 2002 about using it in this way, and if somebody wants to see the publication, I'm happy to share it. But just to be clear, it's seventeen-year-old protocol, so it's not like we're just starting to come up with this. It's been around for a long time and it's been very effective.

Laura Reeves:

Very, very cool. I appreciate that very much. And I am super excited for my worm free puppies, have no idea how excited I am.

Dr. Marty Greer:

Well good. And then there's a few other things we should talk about regarding management.

Laura Reeves:

Yes.

Dr. Marty Greer:

So when you have people to come visit the puppies, which you probably will if they're going to be well socialized, you want to make sure that people are washing their hands with soap and water, not just using one of those hand sanitizers,

because hand sanitizer doesn't kill parvo, bleach and soap do. So hand cleansing and not wearing their outer clothing and putting maybe even a pair of booties on or making them take their shoes off when they come into the home.

Laura Reeves:

Yeah, I'm big on shoes off.

Dr. Marty Greer:

Yeah, you want to be really careful with that. If you do have an episode of diarrhea, you want to try to keep everybody as isolated as you can. So you don't have everyone traipsing through the same part of the house where the puppy or the dogs with diarrhea are. So you want to try to eliminate that. If you do have diarrhea too, you need to first decontaminate, so that means clean up all the fecal material and then use a disinfectant that's appropriate. Bleach is still my favorite disinfectant for parvo and those puppies with diarrhea, although there's rescue and there's chlorhexidine and there's wishy-wash, and there's a lot of really good-

Laura Reeves:

You know what, bleach is good. I am a huge believer in bleach. Like you, I lived through parvo, I believe in bleach.

Dr. Marty Greer:

Yep. And ASPCA has a bleach calculator on their website. So if you're using bleach, there's different strengths at the store and different temperatures require different lengths of time that the bleach is in contact. So if you're in a cold environment, you want to make sure, if the kennel's 45 or 50 degrees, you want to make sure that you're leaving it in contact for the right amount of time. So if you just type in bleach calculator ASPCA, you'll get that information.

Laura Reeves:

Now that's another good one.

Dr. Marty Greer:

See I'm full of all kinds of things that you didn't know I-

Laura Reeves:

Dude, you're a genius. Did I mention how much I love my job and I love you and I love these opportunities? Everyone I talk to, teaches me something, and that is my happy place. So I cannot tell you how much I appreciate your time.

Dr. Marty Greer:

So we'll get these links on websites.

Laura Reeves:

Yes. We'll have lots of links. I want a link to the bleach calculator, that's so cool.

Dr. Marty Greer:

Yeah. And different bleach, and then there's also bleach that isn't really bleach, stuff that you can put in laundry. So make sure if you buy bleach, that you're actually buying bleach, the real stuff.

Laura Reeves:

Yes. And I recognize and I value and I honor the people who are committed to keeping their dogs as free of chemicals as they can. But I think as you have said in other instances, and you can speak to this on your own, but what's the greater good, kill the bugs or not?

Dr. Marty Greer:

Right, right. And dogs get pretty sick from these things, so we want to be careful. So diet change can be helpful with diarrhea. If you've got a problem, there are some really good, highly digestible diets on the market. Hamburger and rice will be fine for the first 12 hours, but once you get to the vet, you really want to get some of the prescription diets that are made from GI disease because they do resolve the diarrhea more quickly than hamburger and rice will.

And Kaopectate is a big deal. Kaolin and pectin is a veterinary product. You can buy it at the farm store in a gallon, you can buy it online in a gallon. But if you buy the human stuff, it's not kaolin and pectin. It may say Kaopectate on the label, but that product actually metabolizes into aspirin in the intestinal tract, so it's anti-inflammatory. But I don't like aspirin in my dogs that are nursing puppies, I don't like it in my pregnant dogs and I don't like it in my newborn puppies. So I really use just good old kaolin and pectin, you can buy a gallon of that for 12 bucks, it's going to last you the rest of your life.

Laura Reeves:

Nice. That's another good one. Everybody says Kaopectate not Pepto-Bismol or whatever, but this is a great hint.

Dr. Marty Greer:

Yeah. It's different. They changed it a few years ago, I don't know how they manage to change it without telling you that they changed it, but if you read the back of the label, the pink stuff isn't what it used to be.

Laura Reeves:

Interesting. And fiber, a lot of people use pumpkin.

Dr. Marty Greer:

Yep. Pumpkin is great. Metamucil is great. The stuff with real actual fiber, you don't want to substitute something like MiraLAX, because that's an insoluble product and that going to give you diarrhea. But the fiber in Metamucil works really well. Pumpkin, there's a lot of good ways that you can do this. There's soluble fiber, there's insoluble fiber, but fiber in general helps because it actually holds the water or the fluid in the stool so that there's some substance and it keeps the dogs from straining and feeling really uncomfortable when they pass stool. So it's a great product.

Laura Reeves:

Excellent. And we talked about our probiotics and we talked about our worming protocol and we talked about not using metronidazole in baby puppies.

Dr. Marty Greer:

Yeah. And there are times you're going to have to reach for metronidazole, but it's really pretty overused. And we should be careful that we're not putting every dog that we have a problem with diarrhea, on antibiotics, because actually what we're doing is taking the intestinal, bacterial flora and messing with it. So we should avoid those if we can, at all possible. Tylan, metronidazole, there's a few products that you and I used to use in the dog show world, that are no longer on the market, but we do want to be really careful. And metronidazole is easy to develop a toxicity, especially in the MDR one dogs and really young dogs, because it does cross the blood brain barrier and it can give you the neurologic disease to the point of seizures. It can be really serious if you're not dosing it carefully.

So don't just pull metronidazole off the shelf and shove it down the dog like it's candy because it has some significant side effects and I've seen multiple cases of metronidazole toxicity over my course of my career. So it is toxic if it's given it too large a dose and the therapeutic range is really narrow. It's doses, sometimes as high as 50 milligrams per kilogram in the therapeutic dose and if you get to 65 milligrams per kilogram, it's toxic. So that's a tiny margin of safety and if you're not weighing your patients and really carefully calculating the dose, it's really easy to overdose it.

Laura Reeves:

Yeah, absolutely, it is. Personal experience with that as well. So yes, absolutely. And realistically, antibiotics are for bacteria and unless we have a very specific bacteria, let's go back to our things that can be wrong, if we have a bacterial infection and we need an antibiotic, what are better solutions?

Dr. Marty Greer:

Well, a culture is a great idea. So if you've got a case of diarrhea that you can't get figured out, send fecal cultures to the lab, and you can find things like e-coli, campylobacter, shigella, salmonella, clostridium. Once you identify this specific bacteria, then you can identify which antibiotic is going to be your best bet. Frequently Azithromycin is one of the drugs of choice, but it can cause vomiting and diarrhea. So again, you want to be really certain that you're on track. A lot of people use Tylan, which has some advantages, but again, you're starting to mess around with bacterial flora again. So I try to damage these guys without using drugs when it's possible, other than kaolin and pectin, which is really clay, fiber, probiotics and an appropriate diet. So a lot of times we can get through these situations with a more appropriate treatment than just reaching for an antibiotic off the shelf every time that a dog has a little loose stool.

Laura Reeves:

Okay. Well that, I think, has covered the poopy from top to bottom.

Dr. Marty Greer:

Yeah, I think we got it.

Laura Reeves:

Oh my gosh. All right. Well poopy happens and go Packers.

Dr. Marty Greer:

For sure.

Laura Reeves:

For sure. Thank you, Marty. I appreciate it.

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 at 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.

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