Pure Dog Talk 441 – Infertility in the Stud Dog

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Laura Reeves:

Welcome to Pure Dog Talk. I am your host Laura Reeves, and I am joined again today by pretty much my favorite human, Dr. Marty Greer. Dr. Marty Greer, is going to join us and talk about infertility in the stud dog. So we just did infertility in our brood bitches, but now we're going to talk about some of the issues that can happen with a stud dog, and they are an important, clearly important part of the process. It takes two to tango.

Dr. Marty Greer:

You got it.

Laura Reeves:

So Marty talk to us about some of the things that we can run into with our stud dogs and how we prevent them, how we fix them, all that kind of good stuff.

Dr. Marty Greer:

Well, we'll start with defining the difference between fertility, infertility and sterility.

Laura Reeves:

Yeah.

Dr. Marty Greer:

Infertility is low fertility, sterility is a permanent condition. So if your dog is sterile, there's no going back. That doesn't matter if you're male or female, there's no going back. If your stud dog is infertile, the implication is that his fertility is low and in some cases, not all, but in some cases we can restore fertility with a combination of appropriate diagnostic workup, appropriate intervention for medications and nutritional supplements and diets. So those are the four hallmarks of what we can do for your stud dog.

Laura Reeves:

Okay. So start with diagnosing whether it is simply low fertility or actually sterile because that's a pretty big deal.

Dr. Marty Greer:

It is. So sterile would be by my definition, on more than one occasion doing a collection of the stud dog and getting no sperm, zero live or dead sperm on multiple collections. So there may be sperm that are there that are dead. There may be sperm there in low numbers, but if you see absolutely no sperm on more than one occasion, and you think you had a pretty good collection based on his libido, then I would probably classify him as sterile, but we can certainly talk about some of the diagnostic testing that should be done before one knights him forever out of the gene pool.

Laura Reeves:

Right. So there is some diagnostics that you can do on this, right? We were just talking about a test that you can do for some actual physical blockage. That's like physically making it so that the sperm cells cannot reach the ejaculate.

Dr. Marty Greer:

Right. So the sperm are made in the testicle. And then the epididymis is the conduit by which the sperm leave the testicle and make it up into the urethra and are ejaculated. So it's this series of really cool tightly little coiled tubules that run on the backside of the testicle and up around, and then into the urethra where the ejaculate comes from. So the epididymis, if it's blocked somewhere in that, on both sides, then you're not going to get sperm. And you will have an alkaline phosphatase level of below 5,000. So alk phos, or alkaline phosphatase, or serum alkaline phosphatase, that's the test that we do on the ejaculate. So you have to have the collection. So you have to have a dog that's cooperative enough to collect. And if his alkaline phosphatase level is below 5,000, either you had an incomplete ejaculate because his head wasn't in the game, or there's a complete blockage of both epididymis.

Laura Reeves:

Okay.

Dr. Marty Greer:

So that's where we start. And the other place that is really important to look is to see after the ejaculation takes place would be to collect a urine sample with a urinary catheter, into his bladder and evaluate the urine to see if there's sperm in there, because there are occasional dogs that will retrograde ejaculate. In other words, they'll ejaculate the wrong direction up into the bladder, so that sperm or the semen is up there. And if that's indeed the case, there is a treatment for that. So those are the two probably simplest and most useful tests for us to start with.

Laura Reeves:

Okay. So we talked a little bit and we'll talk more in other podcasts, but talk to us about that shy stud dog, that one that says hands off the junk lady.

Dr. Marty Greer:

Step away from the junk.

Laura Reeves:

Step away from the junk. What do we do about that?

Dr. Marty Greer:

Well, mostly it's practice. So a lot of those are dogs that have been in a pet type home, not a breeders type home, or sometimes we see the European dogs doing the same thing, and I'm not sure exactly why they must not handle their puppies the same way that we do when they're growing up.

Laura Reeves:

Interesting.

Dr. Marty Greer:

Because I've seen a lot of it in the European imports. So you basically need some practice. You need a dog that has a really good female in heat, standing in front of him, a really cooperative female in heat. So not a bulldog, that's making weird snorty noises, even if she's nice. Because sometimes that's misconstrued as a growl. Not a dog that's going to turn around and nibble at the boy, but a girl that's going to back into him and send an engraved invitation, Hey, big boy, it's over here.

Right.

Dr. Marty Greer:

And so you want to have an experienced, really cooperative, in heat, at the appropriate time in heat female. And that's not always easy to achieve as you know, you don't always get to pull one off the shelf when you need one. So in our practice, we've got clients that have bitches in heat and they're willing to let us use them, but that takes a relationship with the client that they trust you. And we reimbursed the client a credit on their account in our practice. And by doing that, we have trained them to call us when they have a female in heat. They're calling and saying, I'm coming in for progesterone testing, is there a time that I can come, that you can use her for a teaser? And then we'll credit their account. And they may earn enough credits that they can pay for a progesterone test.

Laura Reeves:

I love this plan. Veterinarians, worldwide, listen up this is smart. Way to make use of your resources.

Dr. Marty Greer:

It could be considered prostitution on one hand, but on the other hand, it's really not actual thing for sex because there's no actual contact.

Laura Reeves:

Right.

Dr. Marty Greer:

So we try to keep them separate enough. And of course we want the female brucellosis tested and we want to make sure that everybody's safe and that she's a nice cooperative bitch. Sometimes it's my own dogs, I've got a couple of dogs that are pretty cooperative. And we have to be careful the terminology that we use on these girls, because I don't want to degrade their importance in the breeding program, but with the right female in heat, it can really be encouraging. And there is the learning curve that goes with collecting some of these stud dogs. We've got hunting dogs that have been hit with shock colors because they'd been sniffing at females. We've got pet clients that have been telling their dogs, no, no, no, no, no, no, no, no.

And so pretty soon the dog is confused and they don't really understand if it's okay or not. So sometimes we even have to have the person that's been living with the dog step out of the room because they are intimidating. The other thing is we take off the white coat, we make sure that there's not too many people watching. So I try not to have a student or an observing veterinary in there because it can just be a little overwhelming for an inexperienced male dog. Now, once they get experienced, then it's a whole different discussion. Those dogs are pretty cooperative. And you can generally tell from the collection, if the dog had good libido or if he was holding back. You want to give them a chance to learn. You want to give them a chance to be collected a couple of times.

So if you're planning on using your stud dog to freeze or to ship semen or to do a breeding, the time to find out that he has a shyness issue is not the day you need to have semen collected and shipped. I've had people drive multiple States and they've come in and the dog is like, no, no, no. So it can be overwhelming, and then there's a lot of pressure and the women are always standing there going, how's he doing? How's he doing? You're like, please, we have three rules when you walk into my room with the stud dog. One is don't talk, don't say a word. Number two is, keep the leash loose. And number three is just stand still because otherwise it tends to be very distracting to the dog.

And if you're in a conversation and people get nervous and so they start chatting faster and faster and faster because they're nervous and the dog's not collecting and they're putting pressure on the dog and they say, I know I'm not supposed to say anything. And the dog hears the word, no, even though you meant K-N-O-W know. The dog hears no and that's it. They hear that and they shut down. There's no going back. You get a partial erection on these guys and they are done.

Laura Reeves:

Interesting. I am seeing an entire podcast series on how to train your stud dog to be macho.

Dr. Marty Greer:

Yeah. And that's not always desirable. There are times that it's less than desirable. We've had clients that have taught their field dogs, that there's a love rug. There's a rug we put it in the garage on the day that you get collected, and that's the only time place.

Laura Reeves:

That is how we do it. So yes, I get it.

Dr. Marty Greer:

Exactly. So it's like the flying carpet, it's a magical rug, they get to stand on the rug and they get to be collected. Which is great because then the dog is really clear on what's appropriate behavior and what's not appropriate behavior. And that's a really important thing to teach a stud dog, especially if they're going to be around other females that may potentially be in heat. So that's a great skill, but if your dog doesn't have that skill, just plan ahead, so that there's some practice sessions before the actual time that the semen needs to be collected and shipped.

Laura Reeves:

Okay. So the test that you were talking about to determine if there's a physical blockage, so you don't see any sperm in there, you think he had good libido. So this is a test you can run in house, or this needs to be sent out to a lab?

Dr. Marty Greer:

It needs to be sent out to a lab. There is a test on most veterinarians equipment to test for alkaline phosphatase. But if the dog had a full collection, the alkaline phosphatase level may be as high as 25,000. And that's going to require multiple serial dilutions to get an actual number. So it's easiest to send it out to a diagnostic lab. And of course you want to put on the sample selection box that it's semen not serum so that it's not confusing to the lab, why there's a 25,000 alk phos and why they should do serial dilutions. Otherwise, they're going to be like, this dog should be dead because the liver enzymes are so high. So it is used as a liver enzyme test. But in this particular case, it's on the ejaculate, it's on the semen.

Laura Reeves:

Okay, Perfect. So next let's talk about all of the various things in and around prostate and prostate infections-

Dr. Marty Greer:

Oh, I love this question. Thank you. And I love it because so many people are confused about what to do with prostate disease.

Laura Reeves:

Yes.

Dr. Marty Greer:

So prostates, there's basically four different categories of disorders we can see in the prostate. We can see benign prostatic hypertrophy, prostatitis, hair prostatic cyst, and there can be cancer of the prostate. So those are the four general diseases that we see. And a lot of dogs when they're age five and older, when they're around a female in heat, and it may be a dog at a dog show, it may be the neighbor dog, it may be a coyote in the woods outside your backyard, but any female canine in heat will stimulate the dog to develop some enlargement of his prostate. And after age five, we'll see these dogs stand up from laying down or walk into the house, and blood will be dripping from the penis.

And every veterinarian that doesn't do reproduction says, Oh, okay, there's two things we have to do here. One, we have to put them on an antibiotic and two, we have to neuter them. Well, actually both of those things are incorrect. They put them on antibiotics all the time and yes, the blood dripping goes away because it was going to go away as soon as the female went out of heat. So the veterinarian and the owner are under the mistaken impression that that resolved the problem. In reality, the prostate is still enlarged, it just stopped dripping blood because the female went out of heat. Do prostates get infected? Oh yeah, they can, but that prostatitis, that infection in the prostate is almost always secondary to benign prostatic hypertrophy that went untreated by an appropriate medication. So we want to make sure that we know what we're treating and yes, you can see prostatitis in those cases, those dogs are really sick.

The dogs with benign prostatic hypertrophy or hyperplasia, BPH are not sick. They're bouncing around the house. They're very happy. They're eating. They feel great. They're interested in the female. Everything is wonderful, except that you see this blood. And the second thing that your veterinarian is going to say is you need to castrate him. Well, that pretty much ends the stud dog's career. I have never successfully gotten semen out of a neutered dog. I don't guarantee you a lot of my procedures, but I do guarantee that one. So we recommend that you get the dog to a veterinarian that is comfortable putting the dog on appropriate medication, that might be Finasteride. That might be megestrol acetate. That might be Ypozane, which is a European drug. Love, love, love the drug, but we can't get it in the U.S. right now. So there are some good treatment options that we have that don't require castration.

That leaves the dog able to breed. That leaves the dog fertile. And you don't have to neuter him, but once you put them on that medication, they need to stay on it for the rest of their life or until they're neutered. So just taking them on it and off of it, when the female is in heat, doesn't really resolve your problem because his prostate is going to be enlarged in between heat cycles. This is not going to be as likely to drip blood from the penis. So it's really important that we get the right diagnosis. You can do a rectal exam on the dog and get an assessment of how large the prostate is. But a better test is going to be an ultrasound in almost every veterinarian that does reproduction will have an ultrasound machine. It's simple to do, you lay the dog on their side, you lift up their back leg.

You put the probe on their abdomen, take a look at the bladder, take a look at the prostate and you can measure the prostate and you can look for cystic structures in the prostate. So if you see an enlarged prostate and cystic structures, that dog has benign prostatic hypertrophy or hyperplasia needs to be put on an appropriate medication. If the dog is sick with prostatitis, they still go on Finasteride or Megestrol acetate, or Ypozane. And then they go on an appropriate antibiotic. A culture is always the best way to pick your antibiotic, but in the time that you're waiting for a culture results to come back, we either use Baytril or Trimethoprim sulfa. But I don't use Trimethoprim sulfa in a couple of breeds, those being Golden Retrievers, Samoyed and Dobermans. So I'm really careful with which antibiotics I use.

Laura Reeves:

Interesting I have not heard breed specific antibiotics.

Dr. Marty Greer:

Yeah. There are differences in the breeds and how they tolerate meds. That's a topic for yet another day.

Laura Reeves:

Got it. Good. I love that.

Dr. Marty Greer:

So, if the prostate's enlarged and the dog is sick and you can culture it, then you've got an idea of what antibiotics to choose. If the dog's not sick, they go on appropriate medication. If you ultrasound the dog and it looks like they have two bladders, that's probably a paraprostatic cyst. Those are not common, I've seen a few of them over the course of time. Those dogs do need a surgical intervention, including castration. That's a big deal, but I see maybe one of those every five years. And I look at a lot of prostates.

Laura Reeves:

Wow.

Dr. Marty Greer:

I feel a lot of prostates. So it's unlikely. And then prostate cancer is something that everybody worries about in their intact male dog. But in reality, we see more prostate cancer in neutered male dogs than we do intact male dogs. And there's two general types of that. Most commonly it's either an adenocarcinoma of the prostate, or it's a transitional cell carcinoma that started in the bladder and worked its way down to the urethra and into the prostate. So prostate cancer is really serious, there's no good treatment for it in the dog, but the reality is almost all the dogs that we see that in our neutered dogs. So it's rarely a problem-

Laura Reeves:

That is a fascinating statistic that I had no idea. Everybody thinks that neutering is going to save them from cancer and maybe testicular, but not prostate.

Dr. Marty Greer:

It's a lie.

Laura Reeves:

Huh.

Dr. Marty Greer: Yeah. I hate to debunk it, but it's a lie.

Laura Reeves:

I love it.

Dr. Marty Greer:

I'm full of lots of trivial little bits of information that no one really-

Laura Reeves:

That's why you are my pretty much my very favorite person on earth. It's true.

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 ya. I've been working hard to bring you all podcast episodes that helps 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, phone 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 check 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:

So those are a few things. We talked about the dogs who have the benign prostate problem that can be treated with medication. What about a dog that say been at the dog show and had his testicles cooked from too many hot dryers or been duck hunting and had his testicles frozen from the ice? These are opposite ends of the spectrum, but they happen.

Dr. Marty Greer:

They do. And they're both thermal injuries. As long as the scrotum is still there, and I've actually had one dog leave his scrotum on the truck bed, its testicles came with him, but his scrotum did not. That's an unusual circumstance-

Laura Reeves:

What horribleness. Oh my gosh.

Dr. Marty Greer:

Yeah, it can happen. So thermal injuries do take some time to recover. It takes 62 days to grow a new sperm. So from the time of any thermal insult, whether it's too hot or too cold to the asphalt, out in the summer, California sun or the blow dryer, or like you said, the thermal injury from sitting in the duck blind or sitting in the boat or sitting in the back the truck or helping you shovel snow on the sidewalk, any of those things can cause a thermal injury. So we use a combination of some nutritional supplements that help to restore the quality of the semen. It's typically a perna mussel containing product. My favorite is ICSB International Canine Semen Bank, CF-Plus, which has a whole bunch of other things in it that are magic fairy dust that seem to improve the quality of semen.

And then we also use a combination of anti-oxidants, which may be vitamin C, vitamin E, beta carotene and selenium, along with some other anti-oxidants and then a fatty acid supplement, which also is an anti-inflammatory and then L-carnitine. Frequently L-Carnitine travels with taurine, of course, taurine of the fame of cardiac disease. So we use that combination, that little cocktail of combination of nutritional supplements, which seemed to have some value in improving the quality of the semen. There's also a few dogs that'll have auto-immune disease or that, like we said, may have a bacterial component to this. So there may be some additional treatments, but most of the time we don't have a specific drug other than an antibiotic. If it's appropriate, please, please, please not every dog needs to be on antibiotics. And like we said before, Finasteride, if that's appropriate for benign prostatic hypertrophy.

So there's some over-the-counter products you can use. And then there's some antibiotic and Finasteride, which are prescription medications that may be appropriate depending on the diagnosis. So you really need to have a veterinarian that can do a semen analysis, including a sperm count. So not just looking under the microscope and saying, yep, there's a bunch of them there. We need an actual account. We need to know morphology, which is the shape, we need to know motility, which is the speed at which they move in a progressively forward motion. And we need to know longevity, which is how long the semen lasts and extender. It should last 24 hours refrigerated when you warm it back up, it should swim again. And those will all tell us a lot about the quality of the dog semen and his likelihood of being able to impregnate a female.

Laura Reeves:

Okay. So a couple follow-ups then you're saying typically the thermal injury is not permanent?

Dr. Marty Greer:

Typically not.

Laura Reeves:

Okay. So way back at the first we talked about sterility. What are causes of sterility other than just magic? Seriously, why are dogs sterile?

Dr. Marty Greer:

Age, senility is one of the most common things that we see. And unfortunately, a lot of people don't think about collecting their stud dog until he's old or he's dying of cancer, or he fell in the swimming pool and drowned, some horrible thing happened. Hey, we have dogs that come in for these kinds of things. So sterility goes with age, it goes with testicular tumors. It can go with auto immune disease and other inherited disorders in the male dog. We know in bovine and cattle that certain bulls will have detached heads and detached tails. So there's probably a heritability to that. There's probably a heritability in dogs of autoimmune disease that can contribute to poor fertility. So there's a lot of different things. Tumors are pretty great to diagnose. They're generally easy to diagnose, even owners can typically find those, if you teach the owner how to feel the testicles.

Laura Reeves:

Right.

Dr. Marty Greer:

So just like your female dogs, when you're checking them on a monthly basis, checking them for any breast tumor or breast cancer, we should be feeling the testicles on our male dogs on a regular basis. And if one gets really large and one gets really smaller, you can feel a heart or a firm nodule in there. That's reason to go in for veterinary intervention. If there's a testicular tumor in only one testicle, we can do a hemi-castration, we can remove the effected testicle. And many times the other testicle will recover from the hormonal influence that was being created by the testicular tumor. And it will return to normal in 60 to 90 days. And those dogs will produce about 75% of what we originally saw for semen quality and count. So they may not recover completely, we generally will consider 10 million sperm per pound of body weight to be normal for a dog.

So a hundred pound dog should have a billion sperm. If we remove one testicle, you would expect to see a half a billion, but typically it'll be closer to three quarters of a billion because they can recover and compensate for it. Now, can you show a dog with one testicle? No, not so much, but you can still use them for breeding. So many times those are older dogs. They've been retired. People don't necessarily need to have them intact because they're not showing them anymore, but they can still use them for breeding. And if you've got an older male dog and he's still got the stuff it takes to breed a female, you should be breeding him. We have way too many people that jump on the new young stud dog and they wanted whatever one of the specialty or whatever was paraded out in front of him most recently is the dog they jumped to.

And I'm like, really? Why don't we use some of our 12 and 14 year old dogs? They're still out there. They didn't die of cancer. They didn't die of orthopedic disease. They didn't die because they bit somebody, they're still alive. They're really great dogs to keep in our gene pool. So let's keep them intact. Let's keep them fertile. Let's keep them active. So there're joint supplements and joint diets we can keep them on to keep them moving. There are plenty of things we can do nutritionally for these guys and we should keep them going forward in the gene pool. There's too many of these great dogs that are forgotten. They just get put up to pasture, people forget that they're there and they could really contribute some considerably great material to the gene pool.

Laura Reeves:

Very, very, very valid point. Okay. So one final one, and this falls in the category of listener asking sort of thing. Many of us can account for having seen some green googie coming out of our dogs sheath and being hysterical because there's green googie coming out of there. Okay. Can we speak to this a little bit and what needs to happen with that?

Dr. Marty Greer:

Sure. That's called balanoposthitis. There's actually a word for it.

Laura Reeves:

Not green googie.

Dr. Marty Greer:

I love that word. No, no. Balanoposthitis and it's really common and it is not at all serious. It's real common even in young boys that haven't reached puberty yet. It's frequently seen just like we see the young girls have that puppy sticky vaginitis, a lot of veterinarians again, and owners get weirded out by it and they jump on it and they want to put these guys on medication. And I've seen multiple dogs come in on pretty high powered antibiotics, which is completely unnecessary. If there's green googie, then you can flush out the prepuce with an appropriate solution like saline. You can get it cleaned up. I generally will use something like a panalog or something that's really meant to go on the ears.

It can be put up around the penis to help clear that up. But most of these guys do not need to be on an antibiotic. It's completely normal. It's common. It is not serious. And I just tell people, they need to relax a little bit and not get too worried about it because it is not something that's serious. It's not going to lead to infertility. And people just need to relax a little bit and dogs lick themselves. And while they do that because they can. And so we just have to get over it and clean it up and get over it, and deal with it and move on. Exactly. It's not going to lead to infertility. That's a completely normal thing.

Laura Reeves:

That is basically the question I had seen in that was the answer I believed was correct, but I as always defer to those who know more than I do. All right, Marty, thank you so much. You are always, always a treat and a joy in my day.

Dr. Marty Greer:

Thank you.

Laura Reeves:

And I know how much the listeners appreciate your time.

Dr. Marty Greer:

Well, thank you. I'm always happy to be here. So thanks for including me again today.

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 www.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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