

# **Helping Brachycephalic Breeds Breathe Better**

## **A Special Interview With Dr. Boaz Man**

**By Dr. Karen Shaw Becker**

**Dr. Karen Becker:**

Hi, I'm Dr. Karen Becker, and several weeks ago I wrote an article about Dr. Boaz Man, who has used his CO2 laser to dramatically improve the quality of life and, potentially, [the] lifespan of brachycephalic breeds. And I am so thankful that Dr. Man has taken the time out of his busy schedule to meet with us today on Zoom, to tell us more about his passion, about how he developed this technique, the reasons behind it, and then of course what he's seeing as a result.

So, thank you so much, Dr. Man, for taking time out of your very busy day, and I appreciate you joining me.

**Dr. Boaz Man:**

Yes, it's my pleasure to be here. Thank you so much. I always love to connect with open-minded people and help try to educate on how we can help pets.

**Dr. Karen Becker:**

Well, I love this. And I think all of us, as veterinarians, we all have passions. Our heart breaks for brachycephalic breeds, all of them. I'm a general practitioner (GP) and certainly soft tissue surgery is – I have a soft tissue surgeon, but other than basic things, I don't do any surgical procedures. So, I love the fact that you clearly were desperate enough that you sought training, you have expertise in this area, and you've put your skills to amazingly good use in terms of helping smush-faced dogs breathe better. So, can you walk us through how this came about and how things unfolded for you to be able to provide this amazing service?

**Dr. Boaz Man:**

Sure, I'd be happy to. And one of the first things I'd like to say is, you just made a comment that all vets are making. "Hey, I do some soft tissue surgeries, but that's about it. Just the basic soft tissue surgery." And my goal as a general practice vet – I do not have a board certification in surgery. I've been in general practice now for 20 years. I've been using laser for 20 years, so of course, I have an advantage with laser surgery experience. However, this is a soft tissue surgery, so if you can make an incision and remove a lump with a laser, you can do this.

It's just something that I'm passionate about because, as you are, I like to educate pet parents and other vets about things we can do to help these breeds who are suffering. And I happened to have put a post up about a before and after on a Frenchie that went viral, around the same time that they announced that the Frenchie had become the No. 1 breed in the U.S. after the Lab had been No. 1 for 30 years.

So, I think it was a recipe of a certain timing and maybe the fact that I had been putting this content up that attracted a lot of the Frenchie lovers. Now, it's not only about Frenchies. As you say, the smush face, it's the top three breeds, which are French bulldogs, English bulldogs and pugs. These are considered three most, what we call, extreme brachycephalic, which means their faces are flat. Not only flat, but they're extremely flat. So, they suffer the most with these respiratory issues.

**Dr. Karen Becker:**

We've all seen these dogs. As pet parents, we see them out and about. We all can hear stridor. We hear how difficult it is for them to respire. Our hearts break. It's awesome that you are so well-skilled with a laser, it's amazing. So, how did you – did a Frenchie owner come in desperate and you say, “Hey, I have something to try.” Walk me through how this came about.

**Dr. Boaz Man:**

Yeah. It's interesting because I had been doing laser surgery for many, many years and I actually, like you mentioned before, had a surgeon that would come in to do other surgeries that I wasn't used to doing. Here I had a surgeon, who's excellent [and] qualified, come to my practice and do these procedures without a laser. And I'm like, “Hey, I have a laser sitting in my hospital.”

There are three fears essentially that have prohibited us in general practice from tackling these dogs. And we talk about fears a lot. Fear, anxiety and stress, you probably have heard that many times, whether you're fear-free certified or you're not fear-free certified. But the fears are these — the first fear is the pet parent with that flat-faced dog, that pet parent doesn't want to go to the vet. Why? Because they don't want that dog getting anxious. Why? Because they don't want that dog going into respiratory distress. That's the first fear.

The second fear is that [the] actual dog that gets to your hospital is actually going into that panic mode and getting stressed and anxious, and then starting to have those respiratory issues. Now, the third fear is us vets – because for so many years we went to vet school and we were referring these cases and sending them out and being scared to refer them, [we] didn't want something to happen, and we weren't tackling it head-on. And because these breeds have become so popular, I believe that if we're not trying to do more for them in general practice, we're going to fail this popularity and this challenge. It's like an uphill battle because there's so many of these dogs out there and there's only a handful of specialists that have the time to do it.

And these dogs that are on waiting lists, they're suffering. And how horrible these dogs suffer, especially these dogs that have these extremely flat faces, not only from respiratory issues but secondary issues that are complications of that. And you mentioned helping them with their quality of life. This has been proven to help delay or even prevent the onset of the numerous complications that happen after this has not been corrected over time. Laryngeal paralysis, they get secondary GI (gastrointestinal) issues from the negative pressure in their airways.

So, there are so many things that we're helping this pet with, and there are not many surgeries that I've ever, ever done in practice that I can say are as rewarding for changing quality of life in a dog that walks into your practice, cannot breathe and walks out breathing better, all of a sudden

can smell. It's got an open nose, can swallow [and] not have to worry about an obstruction in front of the windpipe. It's really unbelievable. And it has been proven, the earlier the interaction, the earlier the surgery, the correction, it greatly, greatly improves their quality of life in the future.

**Dr. Karen Becker:**

I'm sure it is a tremendous feeling. You literally, in a one-day, in-office procedure, the animal doesn't spend the night, you're able to take an animal from potentially very poor quality of life to superb quality of life. It's fascinating.

I graduated 25 years ago. I did not learn in vet school how to wield a laser. So, I have to ask, first and foremost, was your interest in laser – Now, I'm certified in rehab, so we use cold laser for back dogs and things like that. But in terms of a CO2 cutting laser, I didn't learn any of that in vet school. And I'm assuming if you – You might've had an introduction, but you had to have had a passion and/or you worked at a hospital that had a laser, so you had an introduction, but tell me how you first got introduced and trained with the laser.

**Dr. Boaz Man:**

Good question. Before I was a vet and when I was going to a vet in Boca, she actually had one of the first carbon dioxide lasers out there. So, I was exposed to laser very early on. And medical technology in the last 20 years – I graduated in 2004 – has changed with devices, and carbon dioxide laser is no exception. The laser from 20 years ago to the laser now is night and day. So, we're now able to cut at the same speed as a scalpel blade. We're now able to minimize trauma to the tissue with this new laser. There's something called Super Pulsed, which is technology that allows you to make an incision and only affect the tissue exactly where you're making the incision, so you're not harming the surrounding tissue.

And I work with VetScalpel, which is the manufacturer of the laser in the United States, very closely. And one of the reasons I came about working with them is because I'm passionate about sharing what we do and how we help pets. And I was putting things out there for a long time on laser surgery. I would say it got to a higher level during COVID because pet parents were not involved in the exam room. And that was hard for us, that was hard for the pet parents. So, I wanted them to see. “Hey, although they're not involved, let's show them the value of what we do. We love what we do, let's share that passion. Let's let them see how laser surgery is helping their pets.”

So, I work closely with VetScalpel. I do have a relationship with them. And I'm only passionate about things that I know can help pets. There's a lot of people that have approached me about doing other things, “Oh, let's get on this bandwagon,” but if I can't prove that the technology or the product is not going to help that pet in a major way, I'm not going to stand behind it. So that's why I'm so passionate about what I do.

**Dr. Karen Becker:**

That makes great sense. Does the company offer CE, or if I wanted to – I know you're saying it's the same as the scalpel, I get that. But I'll be honest, laser, especially in the nares, when it comes to hemostasis or blood control, there's some real advantages, in my opinion, over traditional cutting with a scalpel and laser, especially for [the] mucous membranes [and] soft palate.

So, if I decided I wanted to get trained in this, is there an option for – I would assume after this article came out that went viral, with this life enhanced after one minor procedure, this dramatic change. The story gets out, goes viral. I have to imagine I'm not the only veterinarian saying, “Hey, how do we all learn this and where do we go for CE?” Because as much as cutting is an option, in my opinion, laser would be better. Do you agree with that?

**Dr. Boaz Man:**

Well, yes. And of course, everyone's going to think I'm biased. However, this laser, scientifically, it seals the blood vessels, it seals the nerve endings, seals the [inaudible 00:10:28]. So, you're reducing bleeding, you're reducing swelling, you're reducing pain.

**Dr. Karen Becker:**

Pain. Yeah, reducing. Yes.

**Dr. Boaz Man:**

And going up in the nose and to ablate that tissue in the nose – of course I have a strong headlamp on – with minimal bleeding and no sutures is a game changer. No sutures in the throat is a game changer. Shorter anesthetic time is a game changer. All these things, combined with newer technology – I mean, the surgeons that are performing laser out there, and there's a lot of general surgeon vets, they're doing laser surgery who are afraid of this, need to overcome their fears. And I'm actually going out to conventions. I'm going to the yearly Veterinary Laser Surgery Symposium.

**Dr. Karen Becker:**

Good.

**Dr. Boaz Man:**

You asked me how you could learn to help these vets, because my passion is we help as many of these pets as possible. I can't help them all. And there's plenty of others that are trying to help and doing a great job, but the more of us in general practice that are doing it, the better for these pets.

A lot of these pets really like to travel, but I do have pet parents that travel to me from different areas for this just because they'll call me and say, “Hey, nobody wants to touch my dog.” And

the poor dog – I mean, what, is it supposed to just go into hyperthermia and pneumonia and just die a short life? It's horrible. So, we need to try to help them as much as we can.

**Dr. Karen Becker:**

We do. And part of that, helping them as much as we can, I think is kind of a three-pronged approach. First of all, start breeding dogs that have noses. Reparative confirmation is going to fix the problem generations down the road, number one. Number two, if your animal is in respiratory distress, you have to be able to do something. That requires veterinarians [to] become well-educated but also well-trained in these procedures to be able to offer these services like you're doing.

I would imagine you have people coming from all over now because they're desperate to offer some relief for their animals that are not breathing or respiring well. So, can I ask, if you've done laser [for] let's say 20 years, would you say in the last five years, how much of your day is now doing laser procedures versus what you were doing five years ago?

**Dr. Boaz Man:**

I mean, it's really unbelievable, and it's been a paradigm shift. I wish I could put numbers on it. However, I could tell you the demand has always, always, always been there. But the surgical option and the technology combined with laser surgery just came to a point where pet parents are finding out about it. Not only because of the laser surgery, but because of the research and the data that's out there now on all these pets who suffer. And we've gone from a reactive situation, and we've all been guilty of it. I've been guilty of it as a veterinarian. "Oh, it's a Frenchie. It's a pug. They're going to have breathing issues." To waiting until they get to that respiratory crisis, which is horrible.

So, early intervention is the big thing to help these pets. And these Frenchies are the first ones to present clinically at somewhere around a year old to 2, to 3, to 4, with respiratory issues. And we need to know what the symptoms are to look for, which are really important to educate pet parents. It's not okay when the pet is smiling like this because it's trying to mouth breathe and get oxygen because the nodes are so blocked up it's going, "eh, eh." It's not okay, and it's not okay to say that grunting and that snoring is cute, because these are signs of an airway blockage, and we have gone to that point where we are now taking it head-on from when they're early. And it's great if you have a referral surgeon who can do it in your area. And it's also great if you want to try to learn about it more and do more, especially if you already have a laser.

I'm doing a lot more, I should say, I know that was kind of a roundabout answer, but I'm now doing a lot more than ever. I had no idea there was such a demand until I started putting it out there and sharing how we're helping these pets. And then all of a sudden, it's like it created a windstorm, and I'm happy to be part – I want to be part of this movement that helps to fight this breathing issue. But I can tell you that we're losing the battle. And why I can tell you that is because I try to follow as many of these bulldog "breeders" as possible, and they are breeding for the wrong traits. And unfortunately, the pet parents are falling victim to the miseducation of what a "healthy" Frenchie should look like.

And if you look back in the years, just like you said, they used to have a snout and now there's none. So, we really need to make sure that we do our responsibility in telling pet parents who are looking for Frenchies what to look for, actually see the parents, make sure that they don't have that extreme flat face. It's just such a big deal. They're even calling these Frenchies, they're calling them "big rope Frenchies." You ever heard of that term?

**Dr. Karen Becker:**

No. No.

**Dr. Boaz Man:**

That means their face is so flat that they have this huge fold of skin right above their nose. It's called a rope. And so, they're saying, "Oh, this big rope Frenchie is super valuable." They're putting an extra amount for that. So, it's going to live its whole life with a skin infection, because it has this excessive fold of skin above its nose because its face is so flat that the skin is just drooping in front of it. So, it's really sad.

**Dr. Karen Becker:**

Yeah. It's really sad. And just – I certainly understand how adorable this breed is. I think that's why they're so popular. However – so listeners, readers, viewers, remember, I have a 21-point breeder questionnaire, that if you can't rescue a dog, if you're going to shell money out for a dog, we have to do our ethical and moral responsibility to buy a dog that has been bred for reparative confirmation, meaning the breeder is doing genetic testing to make sure that the genetics are as diversified as possible. And number two, that they're breeding out breed flaws, including the inability for some of these brachycephalic breeds to even respire.

What we can't do is say, "Oh, I cracked. It was a weak moment. I put a deposit down without doing reference check, background check, DNA check." One of the things I would personally make sure is that, potentially, that the animals are whelped naturally, that there's enough diversification in genetics, that the French bulldogs are not born via C-section, that they're naturally whelped, which means those breeders are intentionally doing things to rapidly and quickly do what they can to help restore the genetics.

So, that is our goal, is to stop the breeding of a poorly bred, super flat-faced breed. Get a nose back on a dog so that they can respire. But the fact is, because they are so popular, supply and demand dictates. There's a lot of backyard breeders, a lot of puppy mills, a lot of people who are doing no DNA testing. They have no care about genetics. And they certainly are not looking to enhance breathing and respiratory well-being through wise pairing of dam and sire. And that's of concern for all of us.

You are here on the other end, catching the fallout from this breed being so incredibly popular, people may be not doing their homework, not buying from a responsible breeder, and then they have dogs that have serious respiratory issues. I appreciate you mentioning the fact that the sooner you can do this minor surgical procedure that can greatly enhance well-being, the better it is for them.

Living in a state of hypoxia – I interviewed some longevity experts at the Broad Institute a couple of years ago, and they actually were mentioning that hypoxia is one of the big things that we underestimate in veterinary medicine. That chronic hypoxia, which is of course what happens with brachycephalic breeds, is a contributing factor actually to cancers and a whole host of other degenerative conditions for a body that's not capable of respiring adequately throughout life. You can see how that literally could take years off your dog's lifespan. So, the sooner the intervention, the healthier and the better, when it comes to extending the longevity piece, I'm sure. Walk me through how quickly the procedure takes and what you do.

**Dr. Boaz Man:**

Sure. We should preface this by saying that every dog is different and they all have different risks for anesthesia, regardless if they're going to have a lump removed or they're going to have this surgery. It's important that when we evaluate these dogs we do our homework, just like we would with any other surgery. Are there preexisting issues? Have the appropriate precautions been taken? I'm very proud to do things to the best of my ability. You can see, we have AAHA (American Animal Hospital Association) on our jacket and we're fear-free. So, we always try to do all the things possible to know if we're doing the right thing for the pet. Is that pet going to really benefit from the surgery?

And there's actually a really cool score system that's called the BRisk score, and it actually gives us a number. When we're in there with the pet parent, the first thing we do is go through – “Okay, is your dog a Frenchie?” And if it's a Frenchie, it gets a half a point. “Has your dog had airway surgery?” Because some of these dogs come to us with two or three times of surgeries that they've had. Are we planning on doing other things during that surgery? And as vets, I have to say, especially in general practice, we have a propensity to try to do – “Oh yeah, let's go ahead and do this. Let's do the neuter, let's do the lumpectomy-”

**Dr. Karen Becker:**

Cram it all in. Right, cram it all in.

**Dr. Boaz Man:**

Yeah. “[inaudible 00:20:13], we don't want this dog under anesthesia more than once.” Well, we need to understand and explain in words that this is a functional improvement in the quality of life surgery, and this is not like an add-on for something else or something else an add-on to this.

So, with any surgery we want to shorten that anesthesia time so that we can accomplish something that's going to help that pet. Doesn't matter what it is. The same thing applies with this. As far as the exam, and then once we've gotten all our pre-anesthetics done, and we feel the dog is a good candidate, they come in in the morning.

And one thing that's really important, especially with these dogs tending to be a little bit more anxious and hyper, is to make sure we have adequate sedation and anxiolytics on board when they come into the practice, especially the day of surgery. Because what we don't want happening is, what we have heard of happening in the past, is these dogs getting into the hospital,

sitting in the hospital for an hour or two, then all of a sudden, they're so swollen in the back, you can't even do the surgery, you're trying to save their [inaudible 00:21:15]. So, you don't want that to happen. You want immediate, to give something that's going to help relax that dog, make sure it's going to have a good experience before, during and after the surgery. So that's very, very important. And that goes back to the fear, anxiety and stress.

The procedure itself can be done in about an hour, less than an hour, for both the nose and the throat. The nose part does take actually longer because we're not only making the entrance to the nose larger, but we're going inside each nostril to ablate all that excessive tissue. There's something called Alar fold in there, and there's a bulb that attaches to it all the way in the back. And unfortunately, what happens that I've seen happen with traditional surgery, sometimes we call it a wet surgery, is you're not able to get all that tissue out. There's so much bleeding that it's not visualized, that whole piece is not removed. And then you still have left a problem inside the nostril.

So, this is not Hollywood making a nose job look pretty. This is for functional airway improvement. And that's why you'll see in some of my social media posts I always shine a light up there, even before surgery and after surgery, to show the difference. You can actually see an open nose versus there's nowhere for this light to go because it can't penetrate such a blockage.

**Dr. Karen Becker:**

Yeah, yeah. Did you go to a mentor and see this done? When was the first time you ever did this procedure?

**Dr. Boaz Man:**

Good question. As I mentioned, I have a relationship with VetScalpel. And I approached them actually, because we had already worked together for so many years, I said, "Hey guys, I know there's people out there that are doing it and we're getting a lot of feedback on Frenchies. Frenchies are the number one." And we actually had a very nice conversation [inaudible 00:23:10]. If we don't tackle the issue now and we're not doing this – if not now, then when, basically?

So, I started working with VetScalpel many, many years ago. And some of the people at VetScalpel have been doing this much longer than I, some surgeons have been doing this much longer than I. And I think what was maybe different or something that helped me was actually sharing it. Because a lot of us do such amazing things, we all have such passion, but if you're not putting it out there – Like you are doing things all the time on social media. Now, I may not agree with the things you do, you may not agree with all the things I do, but we're still trying to share something we're passionate about.

And I think that's where a big weakness is for us as veterinarians, to actually share what we're doing. Because like I said, before I put out that I was doing this, I was hardly doing it because people didn't know how-



**Dr. Karen Becker:**

Didn't know, yeah.

**Dr. Boaz Man:**

-[inaudible 00:24:09] these dogs did. As far as the other question you asked me, what was the question? I'm so sorry. I kind of [inaudible 00:24:16].

**Dr. Karen Becker:**

I just wanted to know, because this is something that I didn't learn how to do in vet school. So normally, when I first wanted to do vasectomies on male dogs, I wasn't trained how to do that. I'm a wildlife rehabilitator. So, when I would have roadkill, I would find roadkill and then neuter a raccoon because I didn't have any training. You probably weren't doing laser procedures on roadkill like I have done. But sometimes, when you don't learn it in vet school, you have to figure out a way how to, above all, do no harm. And certainly, before you'd ever practice on a patient, you get some skills behind you. But you had a lot of laser skills prior, so it makes sense that you were able to maybe see this done through a mentorship program and then feel confident enough to do it.

I love that you're empowering general practitioners to gain this knowledge, but I think I want to help – if there are other GPs like myself listening, I want to point them in the right direction. Would it be contacting the laser manufacturer or is there a group of veterinarians that maybe have a referral network? If vets hear this and are inspired, where would they go to learn more?

**Dr. Boaz Man:**

Well, VetScalpel has a lot of training, a lot of information online. And some of us who have lasers, whether it's a VetScalpel or another laser, can be trained remotely.

**Dr. Karen Becker:**

Nice.

**Dr. Boaz Man:**

Zoom is obviously out there now. There are so many things that we can learn how to do, and there are so many videos out there. Any condition for laser surgery, you could probably find it, whether it's on VetScalpel or you just go to YouTube and search for that surgery on YouTube. There are a lot of things you can do without even leaving your practice.

However, I would say, it doesn't replace going to the Laser Surgery Symposium, if you really want to get hands-on experience, you want to meet the people that are actually on the forefront of this technology, you want to make sure that what you're using is the adequate tool. So, just having a laser is amazing, but it's not going to make a bad surgeon into an excellent surgeon. You still have to have technique, you still have to have the basic principles, and all those things

can be something you learn at either a convention like that that's once a year. It's coming up soon in San Diego – Actually I was just that one, but it's coming up next year in San Diego, and they do it once a year.

But also, throughout the year, VetScalpel meets with practices who have laser, who want to upgrade their laser, and they can do some hands-on training at the practice. They can do Zoom training if someone already has one and they want to learn how to do this. I always tell people to contact me, like I'll get text messages or DMs (direct messages) from Instagram, about the surgery and people that are interested in either upgrading or learning how to do their surgery.

**Dr. Karen Becker:**

Yeah, and that's awesome. And I really just appreciate you being so supportive of your fellow peers that want to learn more, do more, figure it out. It's wonderful. So, if people wanted to learn more about you or have questions, how would you like people to reach out to you? Or where should we point people to get more information?

**Dr. Boaz Man:**

Yeah. A lot of my communication is through Instagram, @bocamidtownvet, and I'll respond if someone has a concern. And I'm available always at the hospital too, at Boca Midtowne Animal Hospital. The number is 561-218-2210. My email also is my first and last name, drboazman@gmail.com. I'm easily reachable. And I would say anyone who's interested in learning about it should reach out.

And there's also a locator tool for those pet parents that may be looking for a laser surgeon through VetScalpel, to look for a laser surgeon that they can get help with, to find someone in their area. And if not, we're always willing to try to help the closest next option.

**Dr. Karen Becker:**

That's beautiful, and that's a great resource. I'm so glad that VetScalpel has an online directory. That's incredibly useful, especially if it potentially is all of North America and/or the world. That's a great resource. We'll include that in the article as well.

This is really an amazing opportunity for people to recognize that if they have a brachycephalic breed, that there's hope. And there's hope through trained general practitioners that can learn how to do this procedure adequately and competently, to give a dramatic improvement in quality of life to their patients and, certainly, afford Frenchies and other brachycephalic breeds the opportunity to not just respire normally, but to be healthier longer because they're able to move air.

And I appreciate you putting the time and energy and commitment into not just researching this but learning how to perfect it. And then, in turn, sharing your knowledge with other veterinarians. It's a really beautiful way to support our patients, but also to help us all learn and become better vets. So, I appreciate your commitment to that.

**Dr. Boaz Man:**

Yeah. I appreciate connecting with you and your team. And hopefully, the trend continues to fix more of these dogs that need some help. And there are so many of these dogs out there, and it's so important for us all, as you know, as a vet, to educate and to make sure we're helping pets that suffer.

**Dr. Karen Becker:**

Yeah. Well, I appreciate you being so innovative and just create – Maybe not creating, but you have brought to light a procedure that general practitioners have available, and you're showing the benefits front and center about the quality of life enhancements that are dramatic when this simple and easy procedure is completed. So, I appreciate your incredible commitment to our profession and our patients.

**Dr. Boaz Man:**

Oh, I appreciate it as well. And I have to say, I actually had gotten a couple calls because you had put something out there. People that came to me with their dogs say, “Hey, Dr. Karen Becker said about your procedure and what you are doing,” and connecting all of us is also – Without us all interacting with one another, we're not going to change things, and we don't want status quo. So, I really appreciate you putting that out there [for] people to learn about.

**Dr. Karen Becker:**

You bet. I think that the more of us working together to be able to get the – Like you said, we each have individual passions and desires in terms of professional, what direction we want to go in, and allowing everyone to fully exist in their niche while referring and sharing allows every pet parent to get the care that they need with the doctor that best aligns with them. And that's exactly the power of communication.

So, I appreciate all that you're doing to share the wisdom that you have and for making Brachies feel like [inaudible 00:31:19] healthier. Thank you, Dr. Man.

**Dr. Boaz Man:**

Thank you. Appreciate your time.