

Chiropractic Care for Companion Animals

What Is the Value to Patients and Practice?

by Marie Bartling, DVM

If you had to choose between having back pain or knee pain, which would you choose?

Hmmm. Back pain makes it hard to get up, and knee pain makes it hard to walk. As your pain doctor, I would try to make sure that neither one of them is debilitating to you.

We all know that physical medicine is essential to optimal health for our patients. How often have you heard someone say, “My dog is perfectly healthy, I am so sad he can’t run and play anymore.” When we have the final end-of-life discussion, statistics say that 12–15% of the time the reason is because the animal’s quality of life is suffering due to mobility problems. That’s 1 out of every 10 dogs. I would argue that this number is grossly underestimated if we take into account the impact that poor mobility has on their quality of life before that last day, especially considering that 1 out of 5 of our canine patients has arthritis.

As veterinary doctors trying to manage painful and arthritic conditions, we have to be thorough and consistent in our approach. And sometimes, we have to branch into more creative medical plans to change a dog’s quality of life. We have to alter the biology and physics of their tissues to solve their pain. This group of therapies is referred to in the rehabilitation world as physical medicine.



Ruger had facet arthritis and mineral in the sublumbar ligaments along the spine, which often presents as spondylosis.

Some of us may not recommend therapy we know little to nothing about, but not only are physical medicine options surprisingly effective, we are also capable of doing them as general practice doctors. I have found this to be the case with physical medicine modalities such as laser, acupuncture, and manual therapy, including chiropractic care.

Getting Started

If you are thinking about adding physical medicine offerings at your practice, chiropractic care is a great place to start. To see a list of accredited programs where you can study animal chiropractic care, I recommend you investigate these websites:

- American Veterinary Chiropractic Association, animalchiropractic.org
- International Veterinary Chiropractic Association, ivca.de

To be certified, a veterinarian must pass not only the test from the college but also a formal test from one of the above organizations. It may be wise to look into testing with a certification program soon after your graduation.

Some deadlines may be easier than others; for example, the Options for Animals program affords an opportunity to test with the IVCA the day after you finish their course on-site.

Why Is Physical Medicine Important?

As veterinarians in general practice, we are taught to choose medicine to help fight disease and perform surgery that creates stability. We do not necessarily get training or feel equipped to administer the physical medicine that may be required to rebuild the body.

In some cases, I have heard colleagues and pet owners alike argue that these modalities may not even be necessary. But in human medicine, we accept the inherent value of rehabilitation and physical medicine. For example, we know that after a knee replacement or spine surgery, we have a limited amount of time to restore the range of motion and flexibility around that joint before it scars down, so we go to physical therapy. In dogs, cats, horses, and cows, it's no different. In fact, some of these species make more scar tissue and it happens even faster than in humans.

What Is Chiropractic Care?

In simple terms, chiropractic care is the manipulation of bones to stretch the soft tissues around them and restore movement to a spinal joint. Licensed chiropractors are trained in medicine, anatomy, physiology, and then technique with clinical rotations over four years, just like a medical doctor. Veterinarians who are licensed in chiropractic care also obtain an additional certification.

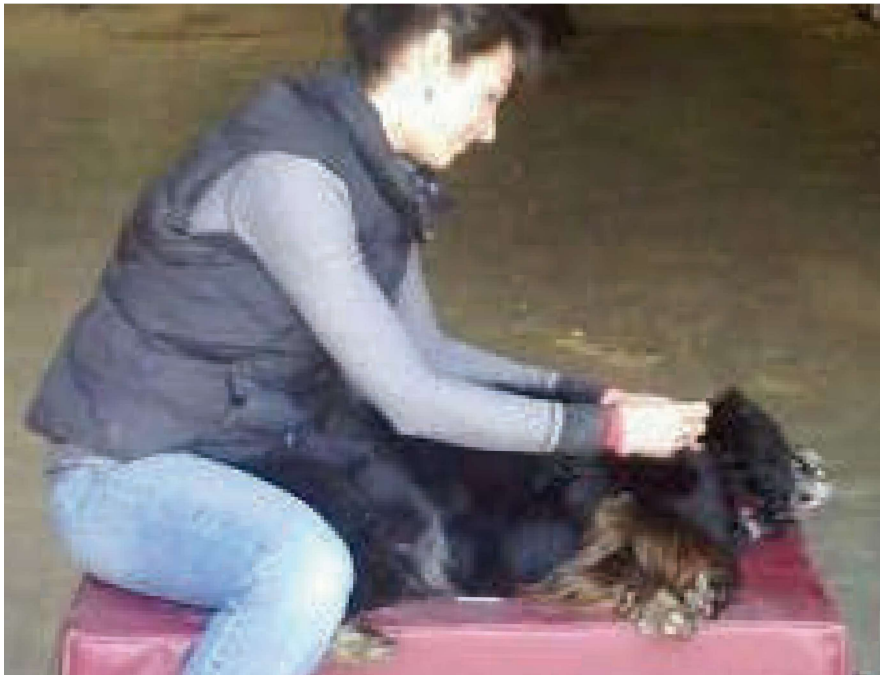
A chiropractor working with animals uses their hands and sometimes an activator to help create movement, exerting small and very specific rapid force on the patient's spinal joints to

release the stabilizing muscles and stretch fascia. An activator is a small spring-loaded tool that can be used in specific adjustments.

A "straight" chiropractor focuses on restoring mobility to the spine and the ligaments and muscles surrounding it so that the spinal cord, nerves, and blood supply to those tissues are optimal. This allows the body to heal through its own innate system. A "mixed" chiropractor will provide several types of therapy, such as massage, stretching, myofascial release, ice and heat, and even technology like transcutaneous electrical nerve stimulation (TENS) or shockwave therapy. These methods help adjust what the muscles are doing to the bones and joints of the spine.

As a veterinarian with a broad background in general medicine, I have practiced for 15 years with a focus on physical health. I have concentrated on athletic fitness, recovery from injury, and optimal mobility for the last 10 years, first with horses and now primarily with dogs. I have studied nearly every tool available to help a body be pain free, to regenerate tissue, and to maintain strength for as long as possible. I use chiropractic modalities on a daily basis to find physical dysfunction and pain in my patients.

A practical advantage to chiropractic care is that it can be used as a standalone service that is economical and simple for clients to understand. Let's face it: not all of our clients want to sign up for weeks of intensive physical therapy and exercise for their dogs, but some will bring them in for



Chiropractic care is the manipulation of the bones to stretch the soft tissues around them and restore movement to a joint.

an occasional adjustment. In addition, it is a low-cost treatment option that offers simple and immediate physical intervention and can have a high impact. Offering chiropractic care options can also attract new clients.

In considering chiropractic care as an option for your patients, remember, you are still a veterinarian—above all, do no harm. We all worry about what causes sudden episodes of disc disease and paralysis; be specific, be gentle, be careful. I have never seen a dog develop paralysis from an adjustment, but again, be cautious and cognizant. Make sure you know what you are treating when you can. Animals do not suffer strokes after adjustments as some people can (due to atherosclerosis), but like any treatment for conditions like intervertebral disc disease or cancer-related pain, you could miss

the bigger picture by performing adjustments without diagnostics.

Let's now take a look at a common issue for dogs that can be lessened or alleviated through chiropractic care. Chronic back pain is a complicated issue because of the multiple tissue types involved and can result in reduced range of motion, impaired proprioception, and overall slower movement. Chiropractic care can be used to retain motion in the ligaments, muscles, and joints surrounding the spine and extremities, leading to a better quality of motion—and life—for the dog.

Chronic Back Pain in Dogs

Similar to humans, dogs can have back pain from muscle dysfunction, joint arthrosis, inflammatory arthritides (facet arthritis), and intervertebral disc disease (IVDD).

We also know that chronic back pain happens secondarily because of other physical asymmetry such as hip dysplasia, and we have to remind ourselves that although we think it to be “secondary,” it can be an equally debilitating source of pain that requires specific treatment.

From a practical standpoint, chiropractic education helps me to understand specific motion and the angles of spinal movement that are critical to identifying back pain and the physical limitations of the spine in dogs. Back pain is debilitating, and it's one of the main reasons that old dogs have trouble getting up off the floor.

In fact, it is less often the joints of the extremities but instead the sheer struggle to raise the whole spine off the ground that is so darned hard for older dogs. To be able to specifically identify where the dysfunction is makes not only my adjustment technique but also my technique for all my physical medicine skills better.

In my experience, back pain is, hands down, the most frequently missed cause of pain in dogs. Dogs with back pain do not limp; they just slow down. Without some careful exam skills, it can be easy to miss. In fact, about 50% of the dogs I am referred to see for “bad” behavior have occult back pain, and at least half of those come off of Prozac or similar medication after their pain is controlled. When we don't feel good, humans and animals alike are less tolerant of others.

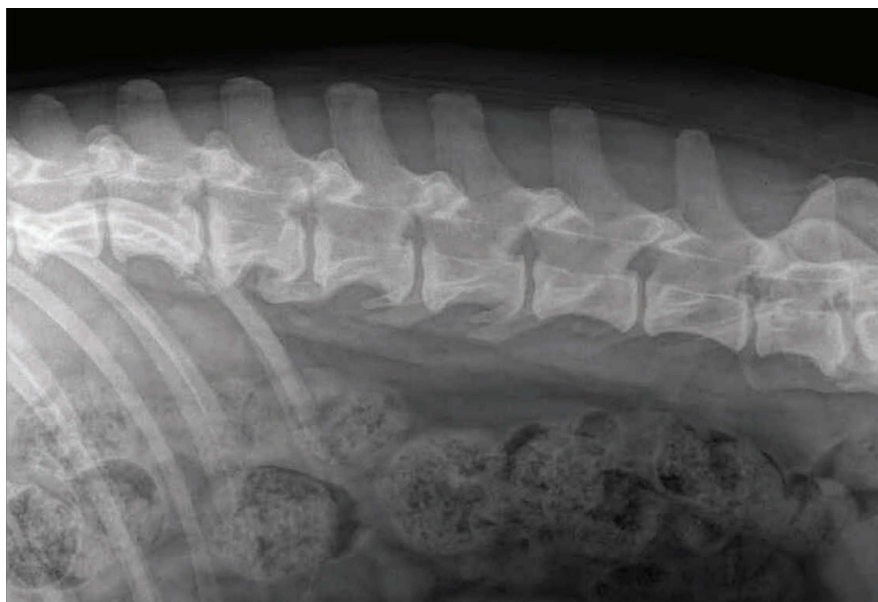
Let's think about back pain from a structural perspective for a moment. When tissues lose elasticity around the joints of the spine, the muscles of the spine are strained and, with

shortened ligaments, can create asymmetrical forces and friction that causes spasms. So, with rest and a medication like Rimadyl, the inflammation will subside, but it won't change the symmetry or flexibility of any of those tissues. What happens if this persists over time? The pain from muscle spasms and friction in the joints becomes a primary and chronic problem.

There are layers of muscles over the spine that span between several vertebrae with overlapping segments. The muscles that are deepest and shortest are responsible for proprioception and rotation while the outer layers are responsible for structure and movement of the overall spine. Epaxial muscle strains can occur in multiple areas at one time and can affect how the smaller proprioceptive muscles work.

The net effect of using medication or surgery without rehabilitative physical medicine is that although we can accomplish movement, it is done using different muscles that can create a cycle of overuse and speed degeneration of ligaments. Degenerative ligaments often thicken, add mineral instead of collagen, and really struggle to keep structural integrity long term. In addition, the muscles of the spine will atrophy and start to deposit more fat instead of new fibers as they remodel if they are chronically painful.

Similarly, ligaments are arranged to connect between vertebrae, on top of and underneath the vertebrae. It has been demonstrated that the ligaments between the articular surfaces of the vertebrae (facet capsular ligaments) may actually have the greatest impact



Ruger's spine radiograph, showing facet arthritis and L1-3 vertebral spondylosis.

on reduced motion of the spine in flexion and extension as well as some axial rotation in anatomical dissection.

So we can see why it's important to work to regain flexibility and comfort of the spine and the range of motion of all the joints in the spine. Sometimes we are so focused on other joints that we forget about how integral the spine is to the rest of the body. Physical medicine is critical for regaining overall comfort and function because these techniques offer methods of fighting physical aging that no medication can match.

Case Study: Ruger

There is one dog I had the privilege to work with who truly exemplified the benefits of chiropractic care: Ruger. As a youngster, he was an avid hunting, hiking, swimming, and retrieving black lab. As a senior, he was a kind and gentlemanly companion. His owner David knew how important it would be for Ruger to stay active and mobile as he

aged. Ruger saw me for chiropractic adjustments for a few years and then ultimately for more pain management as he needed care for arthritis.

Ruger had facet arthritis and mineral in the sublumbar ligaments along the spine, which often presents as spondylosis. As a result, his best pain relief came from chiropractic adjustments focused on movement and separation of the facets and mobilization of the sacroiliac joints. In addition to chiropractic adjustments, he received supplementation; muscle care with massage, stretching, and exercise; and rescue pain meds from time to time after fun activity.

In this X-ray, you can see the facet arthritis that accompanies the L1-3 vertebral spondylosis. We often are told that spondylosis does not cause pain; however, facet pain is real in humans, horses, and dogs. To alleviate the pain, a lot of Ruger's chiropractic treatments were focused on very small and specific movement for these joints.

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Definition of Chiropractic

According to the Mayo Clinic, chiropractic adjustment is a procedure in which trained specialists use their hands or a small instrument to apply a controlled, sudden force to a spinal joint. The goal of this procedure, also known as spinal manipulation, is to improve spinal motion and improve your body's physical function.

Ruger also enjoyed acupuncture, laser, shockwave, massage, manual therapy, swimming, and lots of land exercises, and he lived until he was the equivalent of an 84-year-old person. He stayed off of pain drugs years longer than my average patient and lived one of the best lives I have witnessed for a dog.

Chiropractic care was the entry point to the world of canine rehabilitation for Ruger, and David told me that without that introduction, he would not have known about or tried some of the other therapies that kept Ruger trotting around in his later years. In

this way, chiropractic care is a great entry-level pain-relief therapy that relieves spasms and friction in joints—no pill can do that, and as a low-cost option that shows immediate results, many pet owners will be willing to give it a try. ✨



Marie Bartling, DVM, spends her days working with dogs to relieve pain and build physical health plans in Castle Pines, Colorado, at The Animal Care Center of Castle Pines. She often shares her Facebook page and Instagram page @DrMariesHealthyDogs. Find her on the web at drmarieshealthydogs.com.



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