

Amy Hodshon
Cape Elizabeth
LD 1220

Dear Senator Bailey, Representative Gramlich and honorable members of the Health Coverage, Insurance and Financial Services Committee,

My name is Amy Hodshon. I'm a resident of Cape Elizabeth, and I am submitting testimony in opposition of LD 1220, An Act Allow Chiropractors to Treat Dogs and Equids. I am a small animal veterinarian practicing in Scarborough. I graduated from veterinary school in 2008 and then pursued 5 years of additional rigorous training in veterinary neurology and neurosurgery. I became board certified in veterinary neurology and certified in veterinary neurosurgery in 2013, and I have been a practicing veterinary neurologist and neurosurgeon for the past twelve years. I would like first to point out some of the basic differences between human spines and canine spines.

The anatomy of the quadruped spine (such as in a dog, cat, or horse) differs significantly from a bipedal human spine in features such as the number of vertebrae, the length of the spinal cord relative to the vertebral column, the size of the vertebral canal relative to the spinal cord (smaller in quadrupeds), the cross-sectional shape of the vertebral canal, the size of the intervertebral disks, and the distribution and extent of nerve fibers innervating the spine. Biomechanically, there are also significant differences in the orientation and size of the joints of the vertebral column between quadrupeds and bipeds, because the stresses placed on the spine differ between the two groups. These differences mean that human spines and quadruped spines are not the same in terms of their tolerance to the forces of bending, shearing, stretching, and axial loading. Another obvious difference is that the typical adult human weighs about 10 times as much as the typical adult dog. Many of our small animal patients with spinal injuries weigh as little as 5 pounds, so the tolerance to forces placed on the spine are much less for our patients based solely on size. Another obvious difference is that veterinary patients cannot speak to the person working on them to say when something feels good or bad, as human chiropractic patients can. Veterinarians are trained in animal handling and behavior and in general have years of experience (often their entire lifetime) of working hands-on with animals to understand animal body language to make their interactions safe for both parties. This is not true of chiropractors trained to work only on humans.

In terms of diseases of the spine, the most common spine condition we treat in dogs is intervertebral disk disease, most often due to extrusion of intervertebral disk material into the vertebral canal causing compression and sometimes contusion of the spinal cord. Recent research has identified a genetic predisposition to intervertebral disk disease in many popular dog breeds that is not present in the general human population. Disk disease occurs most commonly in the thoracolumbar spine (midback area) and can result in clinical signs ranging from back pain to complete functional loss of the back legs (paralysis with loss of ability to feel the back legs and tail). This is in contrast to intervertebral disk disease in humans, where disk herniations rarely compress the spinal cord itself (rather, they tend to affect nerve roots and cause back and leg pain – not loss of function). Also, humans commonly experience and are treated for discogenic pain, which is discomfort resulting from disk degeneration without herniation, and this condition is not known to occur in dogs.

Well-meaning owners of dogs with intervertebral disk herniations often seek both pharmacologic and non-pharmacologic means to treat their pets' pain and may, if not instructed otherwise by a veterinarian, seek help from a chiropractor. This is dangerous for the pet, because any additional pressure on a damaged intervertebral disk could worsen spinal cord compression and cause loss of function. We often see dogs whose disk herniation initially only caused pain, then when the dog does some normally innocuous activity such as jumping off a couch, walking down some steps, playing with another dog, or catching a ball, more disk material herniates, and the dog becomes unable to walk. For this reason, strict rest is an essential component of treatment for dogs with intervertebral disk disease. The forces placed on the spine

during a chiropractic adjustment, particularly in the hands of a chiropractor trained to work on an entirely different (and in general much larger) species, could easily be enough to worsen the condition of a dog with intervertebral disk disease. The same is true for dogs with stenosis of their vertebral canal from other diseases including vertebral malformations (present in over 90% of French Bulldogs, now the most popular breed of dog in the United States), wobblers disease, lumbosacral stenosis, and spinal tumors.

Very little research has been published on chiropractic use dogs, and there are no high quality (ie, randomized, blinded, case controlled) studies evaluating its safety or efficacy. One case series of successful manipulation of 3 dogs treated for rib pain and one randomized study looking at prevention of spondylosis in Boxer puppies using chiropractic treatment is all that is out there in terms of evidence-based guidance for practitioners. There is one case report and one case series published in the Annals of Vertebral Subluxation Research that report on successful chiropractic treatment of dogs with intervertebral disk disease, but these articles are so poorly researched and written, with no understanding of veterinary neurology, that they do not contribute meaningfully to our knowledge of any potential beneficial role chiropractic may play in the management of dogs with neurologic diseases. The internet abounds with anecdotes and recommended techniques for pet owners interested in chiropractic treatment, but without research and high quality evidence supporting its use, these remain ill-advised and unsafe in the eyes of the vast majority of veterinary professionals. Please protect the pets of Maine from potential harm from this untested treatment at the hands of practitioners untrained to work on these species.

Thank you for your consideration of this matter.

Amy Hodshon, DVM, DACVIM (Neurology), Certified Neurosurgeon