

## CHIROPRACTIC TREATMENT OF NEUROLOGICAL DISEASE IN DOGS AND CATS

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When evaluating the safety and efficacy of chiropractic treatment for veterinary patients, it is important to consider anatomical differences and common disease presentations. Dogs and cats are not small humans. Anatomical differences, including biomechanical factors associated with being bipedal vs. quadrupedal are important considerations. Common reasons for human patients to seek chiropractic treatment include acute and chronic mechanical neck and lower back pain; amongst other conditions (eg. headache, ligament/joint/muscle sprain/strain, etc). Human patients presenting to a chiropractor for neck or back pain is often, but not exclusively, associated with lifestyle factors (eg. postural-related pain, facet joint dysfunction, etc), where specific orthopedic and neurologic testing paired with client-reported symptomology, can help narrow the differential diagnosis list. The most common disease process resulting in veterinary patients (dogs and cats) presenting to a veterinarian with neck/back pain is intervertebral disc disease (IVDD) and intervertebral disc herniation (IVDH), which often requires a definitive diagnosis by advanced diagnostic imaging (eg. MRI/CT). Performing spinal manipulative therapy (SMT) on veterinary patients without a specific diagnosis increases the risk of potential harm and may predispose to further injury. Given that the most common presentation of neck/back pain in small animals is intervertebral disc herniation; providing a “high-velocity, low-amplitude thrust” technique to a potentially compromised spinal column structural integrity, may lead to worsening clinical signs.

Common neurological conditions in dogs and cats where chiropractic manipulative therapy (eg. “high-velocity, low-amplitude manipulative therapy”) may be either directly **contraindicated** and/or not recommended due to lack of evidence, safety consideration, and risk of exacerbation:

- **Spinal fracture/luxation**
- **Atlanto-axial instability/luxation**
- **Neoplasia (vertebral and/or spinal cord)**
- **Osteomyelitis**
- **Discospondylitis**
- **Empyema**
- Cervical spondylomyelopathy “Wobbler’s disease/syndrome”
- Intervertebral disc herniation (IVDH)
- Non-compressive IVDH (eg. fibrocartilagenous embolic myelopathy, acute non-compressive nucleus pulposus extrusion, intra-dural/intra-medullary IVDE)
- Degenerative lumbosacral stenosis
- Congenital vertebral malformation +/- spinal arachnoid diverticula
- Steroid-responsive meningitis arteritis (SRMA)
- Infectious meningitis/meningomyelitis
- Inflammatory meningoencephalomyelitis of unknown origin (MUO)

Although chiropractic treatment is mainly focused on spinal manipulative therapy (SMT), there are also other treatment modalities in the chiropractic scope of practice that may be beneficial in the treatment of veterinary patients. Similar to certified rehabilitation practitioners (CCRT/CCRP), and certified animal physiotherapists; chiropractors may also be qualified to contribute to adjunctive treatment of veterinary patients, by providing treatment centered around rehabilitation programs, client education, and other modalities not including SMT. Some examples include rehabilitation/exercise prescription, laser therapy, proprioceptive training, strengthening exercises, stretching techniques, acupuncture, client education, etc.

The role of a chiropractor within veterinary integrative medicine may benefit from direct oversight and guidance by a licensed veterinarian. **Safety, efficacy** and **informed consent** are of critical importance, and should be the primary focus when discussing treatment options with clients, and when deciding on the potential benefits and risks of providing chiropractic care to veterinary species.