Spinal Cord Injuries in Cats and Dogs Treated with Prolotherapy

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ABSTRACT

Acute Spinal Cord Injuries (SCI) in both canines and felines remain an ongoing area of controversial and invasive surgical options. Prolotherapy serves to offer a viable treatment modality. Prolotherapy is both a cost effective and humane solution for (SCI) in our animal population. This article reviews cases of SCI treated with Prolotherapy.

KEYWORDS: Prolotherapy, spinal cord injuries.

C ases pertaining to spinal issues in the canine and feline are rather problematic and often difficult to diagnose without benefit of an MRI. Myelograms are often used with radiography to diagnose spinal compression. Myelography is invasive because of a spinal tap and infusion of radio-opaque material into the subarachnoid space. An MRI is costly and this equipment is usually only available at large veterinary medical hospitals. Many clients face the unfortunate decision that back injuries in both the canine and feline are often too expensive to properly diagnose, and animals are euthanized. Steroids are used to stop spinal cord congestion, but they are not without side effects. NSAID (Non-steroidal anti-inflammatory drugs) narcotics or opioids are used for pain management. These too have numerous side effects. In the September 2008 issue of the Compendium, a well respected Veterinary journal, their conclusion in a Continuing Education article “Managing Acute Spinal Cord Injuries,” stated, “At this point, there is no proven treatment for SCI (Spinal Cord Injuries) other than decompression or stabilization surgery when indicated.”

Over the years, I have found that treating back problems with a combination of acupuncture with electric stimulation, ultrasound and laser therapy, with added supplements, has saved at least 75% of my back cases from needing surgery. This usually is an ongoing therapy treatment that, in many cases, continues for the remainder of the animal’s life. In the past several years, I have combined these modalities with Prolotherapy. In many cases, I have seen the cessation of clinical signs, including pain, on a more conclusive basis—over several months, rather than multiple treatments encompassing years.

This article cites two cases I have treated. But first, I will mention one case that, in fact, was not successful. The case was a 9-year-old male, neutered boxer with severe spondylitis. He improved dramatically with ultrasound and Prolotherapy initially, but within several weeks reverted back to the initial presented pain. I suspect that the severity of the spondylitis is an issue, since many other back cases have responded. I would like to see more Veterinary comments on this particular subject.

CASE ONE

Bella, a 3½-year-old female, spayed shih tzu came to the Humane Society for euthanasia. The owner had been told she had only a 10% chance of walking again. She was paralyzed (hind limbs) and in pain along the back and neck areas. The owner reported that there had been prior incidences of back problems and that had progressively worsened over time.

Radiographs indicated and read by Dr Van Knox of Susquehanna Veterinary Imaging indicated “C6 vertebral body tipping and C4–C5–C6–C7 intervertebral spaces slightly wedged. C4–C5 is narrower than C3–C4 and C5–C6. Mineralized disc material occupies the C3–C4–C6–C7 spaces.” And his diagnosis read as “possible cervical spine intervertebral disc disease C4–C5 > C5–C6 > C6–C7.” His recommendation; “Myelography, CT and / or MRI would be needed to evaluate the spinal cord compression from the ligamentous hypertrophy or intervertebral disc extrusion.” (See Figure 1.)

Bella’s family was not in a position to afford further diagnostics much less the estimated $10,000 dollars for back surgery. On November 29, 2009, we started treatment of laser therapy and Prolotherapy under light sedation (.3cc Telazol®). Small amounts (1/8cc) of Prolotherapy solution (¼ dextrose, ¼ lidocaine, ¼ traumel, ¼ Vit B12), was injected in the intervertebral spaces from C3–L3 on either side of the spine. This was followed by acupuncture and electric stimulation for 30 minutes while Bella was still waking up.
was followed up by a supplement regimen of bromelain, omega 3, and probiotics, along with physical therapy (hand held neuromuscular stimulation and exercises).

We repeated this procedure four times at weekly intervals, adding Prolotherapy of the right knee on three of those sessions. We then waited three weeks and did sessions five and six supplemented by ACell’s Matristem® injections.

The dog’s progression was quick. By the second treatment session she was standing, albeit wobbly. By the third session she was walking a few steps on her own and by session four, it was evident she was well on her way to total repair. She was cage confined all of this time. By session six, which was two months later (January 29, 2010), we confined her one week after the last treatment and then let her loose to resume her life.

CASE TWO

Mattie, an 11-year-old male, neutered maltese. In this case, the dog fell off a luggage cart when going to the airport to board the private plane to Cabo, Mexico. He presented the next day to me in severe pain. He was moving very slowly, limping right hind and the pain was palpable on the lower cervical area. Radiographic findings read by Dr. Van Knox at Susquehanna Veterinary Imaging indicated “C5–C6 and C6–C7 intervertebral spaces repeatedly narrow. Spondylosis deformans present at C7–T1.” His diagnosis was narrow C5–C6 and C6–C7 intervertebral spaces and chronic instability at C7–T1 intervertebral space.” His recommendation: “To evaluate the above spaces further to see if there is spinal cord or nerve root compression – CT, MRI or myelography is needed.” (See Figure 2.)

The owner refused further diagnostics because of the dog’s age, and proceeded with Prolotherapy within several days after the injury. We did four sessions, each a week apart. We started each treatment with laser therapy, then Prolotherapy was administered. Small amounts (1/8cc) of Prolotherapy solution (1/4 dextrose, 1/4 lidocaine, 1/4 trauma, 1/4 Vit B12), was injected in the intervertebral spaces from C3–T3 on either side of the spine. The fourth session we also administered Prolotherapy in his right knee because of patella luxation (common in the breed). All sessions were followed by acupuncture and electric stimulation. This procedure was followed up by supplementation of weekly Adequan® injections alone. The owner refused to cage and confine the dog in between sessions. By the third session, Mattie was walking and playing normally without pain. (See Figure 3.)

In Conclusion, Prolotherapy has its place in a wide range of Veterinary applications. As these cases prove, it is a viable treatment in Acute Spinal Cord Injuries for four-legged creatures.■