



Acute Onset of Neck Pain in a Dog

Curtis W. Dewey, DVM, MS, Long Island Veterinary Specialists

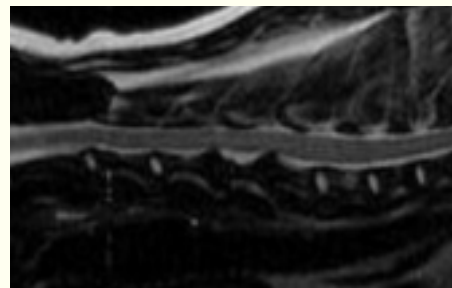
An 8-year-old, spayed female Maltese with a history of well-controlled atopy and inflammatory bowel disease (IBD) presented with apparent neck pain.

History. Pain seemed to develop approximately 10 days before hospital presentation. Before its onset, the patient had been receiving a low dose of oral prednisone for IBD and allergy shots for atopy. The owners report that the dog walked with its head down, was reluctant to walk down stairs, and had a decreased appetite. Since the onset of neck pain, the dog occasionally showed shifting thoracic limb lameness. Cage confinement was attempted but was not successful in resolving the problem.

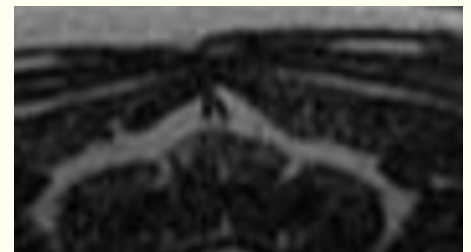
Examination. Physical examination was normal. Neurologic examination was also normal, with the exception of a “nose-down” posture and cervical hyperesthesia on palpation of the neck. The dog appeared to be experiencing severe neck pain.

Laboratory results. Within normal limits.

T2-weighted magnetic resonance images of cervical spine



Sagittal view



Axial view

ASK YOURSELF ...

Which of the following is the optimal therapeutic plan for this dog?

- A. Perform fenestration procedures at the C4/C5 and C5/C6 intervertebral disk spaces.
- B. Administer large doses of glucocorticoids as an alternative to cage confinement or surgery.
- C. Perform ventral slot procedures at the C4/C5 and C5/C6 intervertebral disk spaces.
- D. Administer a combination of a nonsteroidal drug (e.g., carprofen) and a glucocorticoid (e.g., prednisone).
- E. Continue cage confinement for a full 4 weeks.

continues

Correct Answer: C
Perform ventral slot procedures at the C4/C5 and C5/C6 intervertebral disk spaces.

Hansen type I (often referred to simply as type I) disk extrusion is common, especially in small-breed dogs. When these extrusions occur in the cervical region, severe neck pain with few if any neurologic deficits is a common clinical presentation. Dogs with cervical type I disk extrusion occasionally exhibit thoracic limb lameness—this is referred to as a “root signature” because it is believed to be due to irritation of cervical nerve roots by laterally extruded disk material.¹

Disk fenestration is a procedure of questionable efficacy that is directed at prevention of further disk extrusion into the vertebral canal. Since fenestration does not allow for removal of the

disk material within the vertebral canal, which is the cause of the discomfort, it is not a suitable therapy.^{1,2}

Antiinflammatory doses of glucocorticoids are often used in cases of disk extrusion but should only be used in medically managed patients under strict cage confinement.¹

Because of potential for additive adverse side effects (especially gastrointestinal), glucocorticoids and nonsteroidal antiinflammatory drugs should never be administered concurrently.¹

TAKE-HOME MESSAGE

In dogs with unrelenting neck pain due to type I cervical disk extrusion, surgical treatment via a ventral slot procedure is often indicated.

The full 3- to 4-week confinement period, often recommended as a medical therapy for type I disk extrusion, is contingent on a positive response to such confinement within the first week.¹ In this case, confinement therapy clearly failed because the dog was still experiencing considerable discomfort.

The dog in this report is unusual because there were two concurrent disk extrusions. Exceeding the recommended ventral slot length and width may lead to vertebral instability.³ This factor was of particular concern in this case because surgery was done on two adjacent intervertebral disk spaces. An alternative approach could have been to perform a dorsal decompressive procedure over the affected disk spaces.⁴ ■

See Aids & Resources, back page, for references, further reading, and contacts.

CDC Advisory: Monkeypox

The Centers for Disease Control and Prevention (CDC) has developed the following guidelines to assist veterinarians in protecting the health of their staff, clients, and patients in regard to the recent outbreak of monkeypox virus infections among prairie dogs, a Gambian rat, a rabbit, and humans who had direct or close contact with them.

TRANSMISSION IN HUMANS AND ANIMALS

Human infection may be acquired through nasopharyngeal, oropharyngeal, or cutaneous routes. The incubation period from exposure to fever onset is about 12 days. The route of transmission in animals is less clear. The virus might be transmitted to animals through the nasopharynx or oropharynx, through skin abrasions, or through the ingestion of infected animal tissue.¹

SPECIES AFFECTED

In this outbreak, most human cases have been associated with close contact with prairie dogs. The prairie dogs may have been infected by an imported species of exotic mammals, possibly Gambian giant rats, kept in close proximity. Because the types of animals that may contract monkeypox are currently unknown, all mammals should be considered susceptible.

EXAMINING SUSPECT ANIMALS

Veterinarians should be suspicious of monkeypox in ill prairie dogs or Gambian rats, or any animal presenting with a history of fever, conjunctivitis, respiratory signs, and nodular rash. Veterinarians should check with state and local health officials for recommendations as to whether animals with suspected monkeypox can be transported to veterinary clinics.

Veterinarians who decide to examine or treat animals with suspected monkeypox should use infection control precautions to protect the health of themselves, staff, and clients, as well as other animal patients in the clinic. When examining potentially affected animals, the following precautions apply:

1. **Hand hygiene** after all contact with sick animals and contaminated surfaces
2. **Gown and gloves** for contact with animals and contaminated surfaces
3. **Eye protection** if splash or spray of body fluids is likely
4. **Respiratory protection** employed before entering exam room
5. **Containment/disposition** of contaminated waste as recommended by state or local health officials
6. **Handling patient-care equipment** in a manner that prevents contamination of skin and clothing. Used equipment must be cleaned and reprocessed appropriately.

continues on page 46