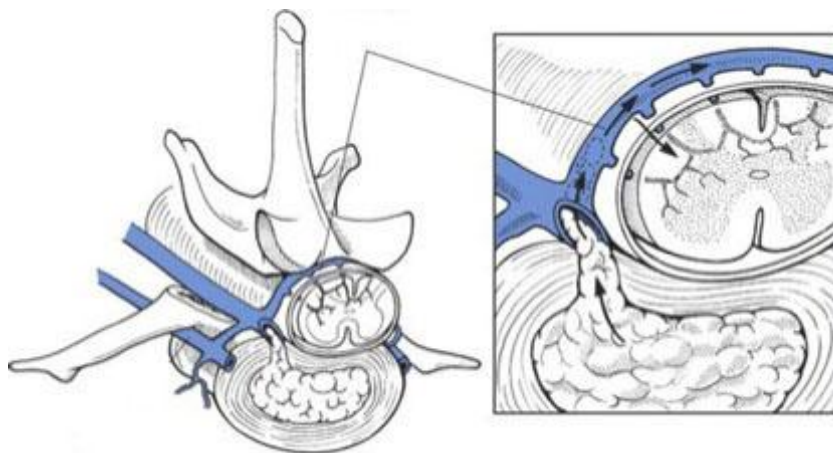


FIBROCARTILAGINOUS EMBOLISM (FCE)

Fibrocartilaginous embolic myelopathy.

Fibrocartilaginous embolism (FCE) occurs when fibrocartilaginous material becomes trapped within a spinal or vertebral blood vessel. FCE can be thought of as a “stroke to the spinal cord.” When this happens, blood supply to a small portion of the spinal cord is compromised and spinal cord injury ensues. The fibrocartilaginous material is thought to originate from the intervertebral disk (nucleus pulposus) but how it enters the blood vessel is still speculative.



Fossum, TW, Small Animal Surgery: 3rd ed
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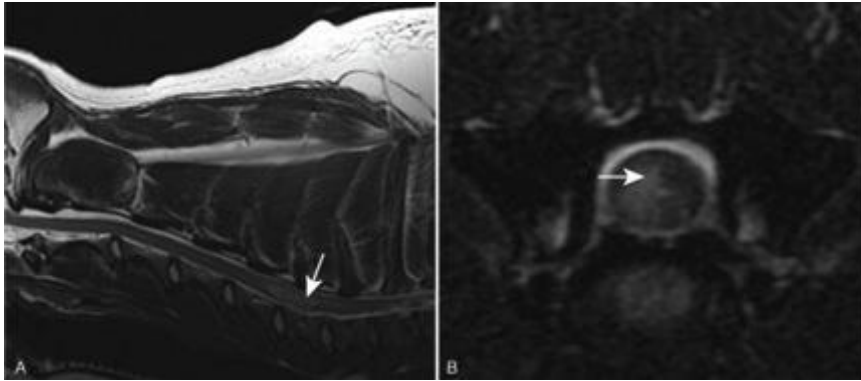
FCE most commonly affect mid-sized to large-breed dogs (German Shepherds, Boxers, Labradors) and less commonly the small breeds (Miniature Schnauzers are predisposed). Young adult dogs are most commonly affected, but very young dogs have also been reported. This disease is very rare in cats.

Symptoms

Usually there is an acute onset of neurologic signs that may include in-coordination, weakness, inability to stand, and/or paralysis of the limbs. Owners may report these signs occurring suddenly after a mild injury or extreme activity. Depending on the region of the spinal cord that is affected, one, two, or all four limbs may be affected. These signs may worsen over the first 24-48 hours, but usually remain stable or improve after that time period.

Diagnosis

The first step in diagnosing this disease is to rule out other possible conditions that could cause similar neurologic signs. This may include intervertebral disk disease, trauma, cancer, infectious agents, or inflammatory conditions. Usually advanced imaging (CT, myelogram, or MRI) is necessary to help diagnose FCE. CT scan and myelogram may show a region of spinal cord swelling or a focal area of abnormal appearance. MRI may be able to locate the area of the spinal cord affected by a focal region of abnormal intensity. Below are MRI images showing a hyperintense region consistent with FCE.



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Treatment

There is no specific treatment for FCE. Treatment may include a combination of rehabilitation therapy, cage rest, supportive care, and/or corticosteroids. Some animals affected with FCE may resolve spontaneously without any therapy.

Prognosis

Prognosis depends on the extent and location of the FCE. Recovery may take a few days, a few months, or the patient may have permanent residual neurologic deficits. It is difficult to predict how an animal will recover after FCE. A veterinary surgeon can help assess prognosis on a case-by-case basis.

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