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CT APPEARANCE AND SURGICAL TREATMENT OF A HANSEN TYPE 1 (HT1) INTERVERTEBRAL DISC HERNIATION IN THE THORACOLUMBAR REGION IN A PEKINESE: CASE REPORT

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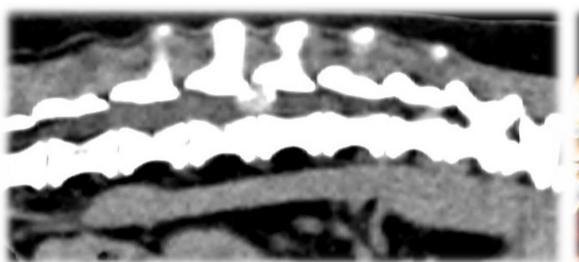
Abstract: The present report describes the CT appearance and the surgical outcome of a Hansen type 1 (HT1) intervertebral disc herniation in the thoraco-lumbar region in a toy breed dog following hemilaminectomy.

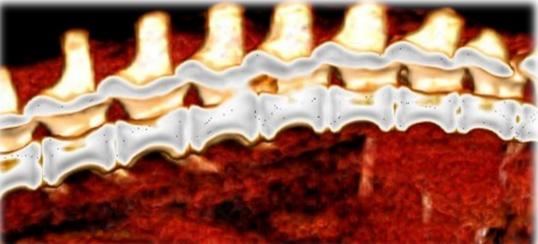
Introduction

Intervertebral disc herniation is one of the most common causes of myelopathy in dogs. Degeneration of the peripheral component of the disc material can cause its herniation in the spinal canal and subsequent compression and/ or concussion of the spinal cord

Material and method

A 7-years-old female, entire Pekingese presented at our hospital nonambulatory. The patient had bilateral proprioceptive and motor deficits in the hind limbs being paraplegic. Deep pain sensation was still present in the pelvic limbs. The CT report confirmed the presence of a Hansen type 1 intervertebral disc herniation (HT1), the disc material occupying over 50% of the vertebral canal.

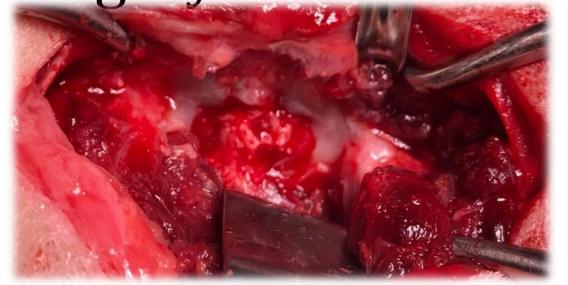




Considering the severity of the neurological signs and the identification of the acute compression of the spinal cord, the patient underwent the following day hemilaminectomy surgery on the left side with the aim to perform the decompression of the spinal cord and the removal of disc material from the L3-L4 level.

Results and discussions

Less than 24 hours after the surgery, the patient was ambulatory, with a normal appetite, normal urination and defecation, being very lively. Neurological examination revealed almost normal proprioception and functionality just 12 hours after surgery.





Hemilaminectomy is the most frequently used surgical technique for decompresing the spinal cord in dogs and cats, being also the most indicated technique in thoraco- lumbar spinal cord compressions due to intervertebral disc herniation in dogs.

Conclusions

The classification of disc herniations according to the model proposed by Hansen and Olsson is fundamental in choosing a correct treatment plan. The chances of functional recovery in patients suffering from acute spinal cord compression in the thoracolumbar region are better, the sooner the decompression surgery is performed, hemilaminectomy currently being considered the most appropriate surgical technique for the treatment of compressive myelopathies in this region.