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## LUMBOSACRAL INTRASPINAL GANGLION CYST IN A CAT

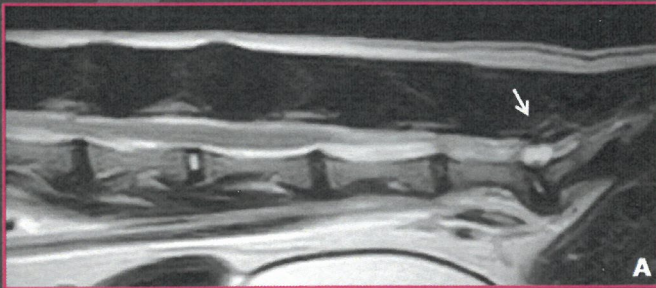
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### • INTRODUCTION

Intraspinal cysts include degenerative non-meningeal extradural cysts arising from the periarticular joint tissue<sup>1,2</sup> and, less commonly, from the ligaments of the vertebral canal and intervertebral discs<sup>3,4</sup>. Spinal extradural synovial and ganglion cysts usually cause slowly progressive clinical signs but occasionally are clinically silent<sup>5</sup>. Histologically, synovial cysts are lined by sinovium-like epithelial cells, whereas ganglion cysts have a collagenous capsule or fibrous wall surrounding myxoid material and they should have no communication with the joint cavity<sup>1,2</sup>; they seem to represent the same entity at different stages of development<sup>6</sup>. The purpose of the present report is to describe the clinical signs, surgical treatment and outcome in one cat presenting with extradural spinal ganglion cyst.



### • TREATMENT AND FOLLOW UP

A L7-S1 dorsal laminectomy was performed to approach the spinal canal. A clear fluid containing cyst of approximately 0,5 cm in diameter was identified between the right L7 nerve root and cauda equina, showing no contact with the articular joint. The cyst was excised and a clear fluid flowed out; a sample of the cyst wall was submitted for histologic analysis.

The cat recovered uneventfully from surgery; at the time of re-examination, 10 days later, her neurological condition had improved and at 4 months after surgery she did not show any neurological deficit.

### • HISTOPATHOLOGICAL EXAMINATION

Revealed thick disorganized sheaths of fibrocollagenous tissue, collagen necrosis and infiltration of lymphohistiocytes and siderophages aside the most vascularised parts. The luminal parts were lined by flattened mesenchymal cells. The lesion was consistent with an intraspinal ganglion cyst.

### • CONCLUSIONS

Spinal extradural ganglion cysts are uncommon in dogs<sup>7</sup> and have never been described in cats. The causes and pathophysiology of cysts are poorly understood and controversial. Pathogenesis of cysts arising adjacent to the intervertebral joint has been linked to both degenerative disease and trauma<sup>8</sup>.

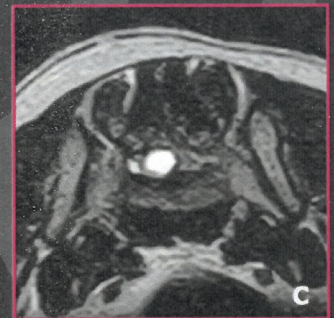
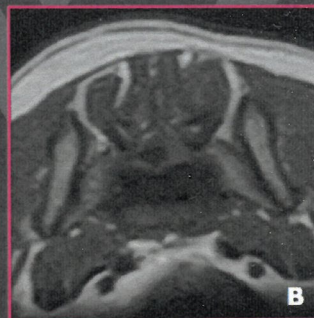
Several conditions can cause clinical signs related to myelopathy or radiculopathy in cats and extradural cysts should be considered in the differential diagnosis.

### • METHODS

A 16 years old neutered female DSH cat was referred for neurological examination of reluctance to jump, stiffness of the tail and low back pain started 2 weeks prior to presentation. Neurological examination revealed pelvic limbs ataxia, a reduction in perineal reflex and lumbosacral pain. The presumptive anatomical localisation was suggestive of L4-S3.

### • DIAGNOSTIC PROCEDURES

The cat underwent magnetic resonance imaging (MR) examination (0,4 T; Hitachi Medical System) of the lumbosacral spine. A rounded structure within the spinal canal at the level of the L7-S1 epidural space was identified. The lesion was dorsal to the lumbosacral disc, slightly lateralised on the right side; it appeared hyperintense to spinal cord parenchyma in T2W, hypointense in T1W images and it was consistent with a fluid-filled cystic structure. Significant displacing of the filum terminale was associated with the lesion. A tentative diagnosis of intraspinal cyst of the lumbosacral region was made.



(A) T2W sagittal image of the lumbosacral spinal cord. There is a round hyperintense lesion (white arrow) at the level of the lumbosacral spinal canal. (B) T1W and (C) T2W transverse images at the lumbosacral joint. There is an hypointense in TW and hyperintense in T2W mass displacing and compressing the dural sac. Bilateral articular process remodelling is evident.

### • REFERENCES

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