



21-22 November 2024

CERVICAL DISC EXTRUSION IN C4-C5 AREA IN A BICHON FRISE: CASE REPORT

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Abstract: A 5-year-old Bichon Frise dog was presented for clinical and neurological examination following the onset of tetraplegia lasting less than 24 hours. CT myelography show a disc extrusion in the C4-C5 space and a ventral slot procedure over the L4-L5 was performed to remove the herniated gelatinous nucleous pulposus. CT myelography remains a reliable technique for assesing acute intervertebral disc extrusion, particularly when the disc material is not mineralized.

• Introduction

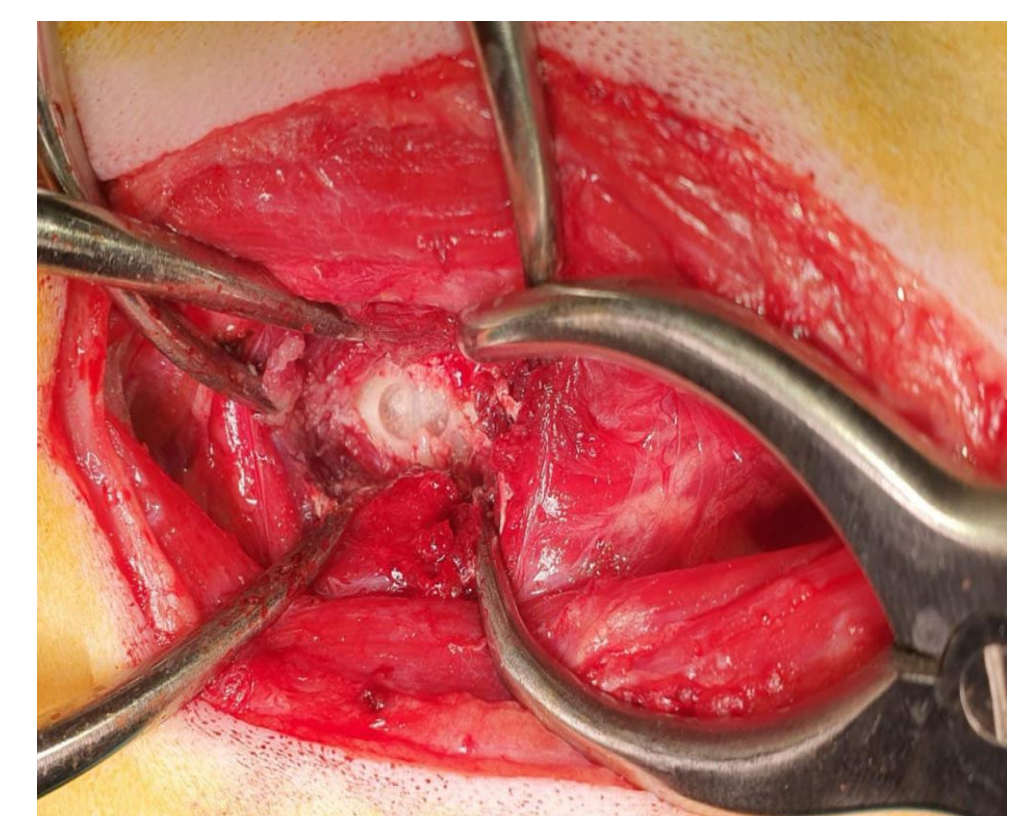
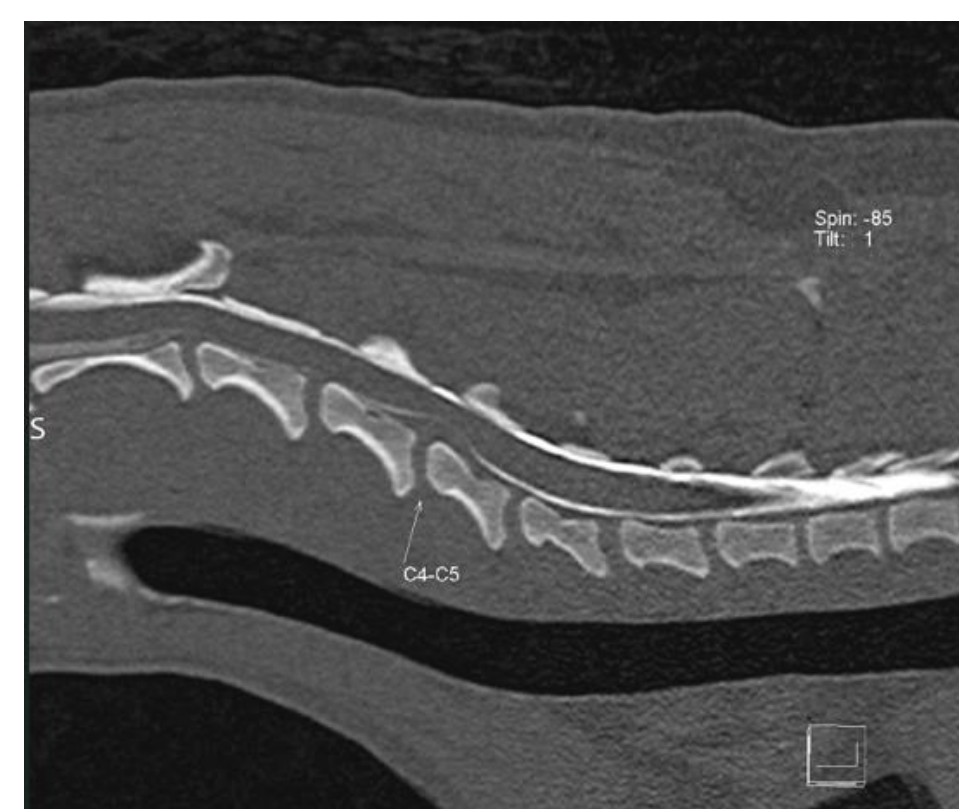
Intervertebral disc diseases are one of the most common neurological disorders in dogs. Cervical intervertebral foraminal disc extrusion is a rare condition that primarily leads to cervical hyperesthesia, ataxia, tetraplegia, with most cases showing a normal neurological examination. The diagnosis of intervertebral disc extrusion can be a challenge when radiography and conventional Computed Tomography (CT) can fail to identify the extruded discal material. Nuclear Magnetic Resonance and CT myelography are ore sensitive and allows a better visualization of the intervertebral foramina.

• Material and method

A 5-year-old Bichon Frise dog was presented for examination following the onset of tetraplegia lasting less than 24 hours. After neurological examination a CT. examen was performed. For CT scan the dog was sedated using Dexmedetomidine in a dose of 10 mcg/kg (Dexdomitor, 100 mcg/ml, Zoetis) and Buthorphanol in a dose of 0.3 mg/kg (Butomidor, 10 mg/ml, VetViva). A myelography was necessary to localize the disc extrusion by insert 0,4 ml solution of Iopamidol (Iopamiro, 375 mg/ml, Bracco Imaging Spa, Italy) in the intervertebral space between L5-L6.

• Results and discussions

After conventional CT scan, no disc extrusion was identified. A C4-C5 disc extrusion was identified after CT scan myelography. A ventral slot procedure at the C4-C5 level was performed to decompress the spine. The recovery after surgery progressed well, and the dog returned to normal within less than 12 hours.



Over the last decade, the use of advanced imaging modalities has increased the accuracy in the diagnosis of intervertebral disc disease in dogs. In a study performed by Bersan et al., fully recovered after surgery and return to normal exercise within a median time of 7.5 weeks.

• Conclusions

CT myelography provides superior visualization and detection of disc extrusion in dogs compared to conventional CT. The recovery after ventral slot in cervical disc extrusion is rapid, the neurological sign start to disappeared immediately after recovery from anesthesia.

Acknowledgement: I would like to express my gratitude to my colleagues for their unwavering support, to the students involved in the monitoring and postoperative rehabilitation of the patient, and to the owners for their trust.