

Surgical treatment of cervical (C7-T1) instability caused by discospondylitis in a horse

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Products

Computed Tomography (CT) for diagnosing and planning surgical treatment of cervical discospondylitis.

Hospital / Authors

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Clinical Background

Cervical discospondylitis is a rare but debilitating inflammatory condition in horses, often caused by bacterial infections. Clinical signs include neck stiffness, reluctance to move, and forelimb ataxia.

Aim of Study

To describe the presentation, diagnosis, and surgical treatment of a horse with C7-T1 instability caused by discospondylitis, focusing on CT's role in surgical planning and outcome evaluation.

Cohort Study

A 3-year-old Quarter Horse gelding with a 4-week history of neck stiffness underwent CT imaging and CT myelography, confirming C7-T1 discospondylitis with vertebral instability.

Results

- CT identified significant vertebral endplate sclerosis, lysis, and spinal cord compression at C7-T1, providing detailed anatomical insight for surgery.
- A successful ventral intervertebral body fusion using cortical screws and a locking compression plate was performed.
- Marked post-operative improvement in mobility and range of motion was observed, sustained over 4 months.
- CT-guided diagnosis and surgical planning minimized risks and improved treatment precision.

Summary

- **CT enabled precise diagnosis of discospondylitis**, identifying vertebral and spinal abnormalities critical for surgical intervention.
- **Surgical fusion restored stability and improved clinical outcomes**, offering a viable treatment for severe cases resistant to conservative therapy.
- **Detailed imaging facilitates targeted, effective surgical approaches**, reducing recovery time and enhancing prognosis in equine spinal conditions.