

IT'S YOUR CASE

Species: Canine

Breed: Crossbreed, small

Sex: Female Neutered

Age: 3 years

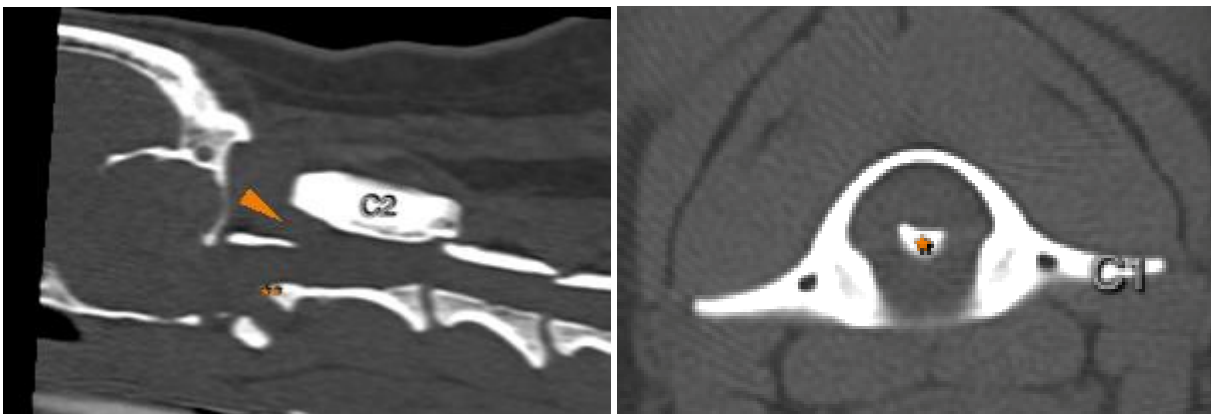
Clinical History:

History of intermittent all 4 limbs ataxia and weakness.

Details of study and technical comments: CT examination of the cervical vertebral column in standard and sharp algorithm is provided for interpretation.

Diagnostic interpretation:

There is malalignment of the atlantoaxial joint. This is characterized by dorsal subluxation of C2 relative to C1, creating increased space between the spinous process of C2 and the dorsal arch of C1 (orange arrow head). The dens (orange stars) is reduced in size and is substantially dorsally displaced relative to the ventral aspect of C1. This causes moderate compression and focal kinking of the spinal cord parenchyma. The density of the spinal cord parenchyma at this level is nonuniform, however this can be artifactual. Limited visualization of the soft tissues that support the dens.



Conclusions:

1. Atlanto-axial subluxation
 - a. Moderately malalignment of C1-C2
 - b. Focal spinal cord compression



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This report is based on the available history and radiographic interpretation only and not on a physical examination of the patient. It must therefore only be interpreted by a currently licensed and registered veterinary surgeon responsible for the care of this patient.

- c. Hypoplastic dens
 - d. Questionable focal parenchymal spinal cord lesion-incompletely characterized due to limitations of CT
2. No other substantial findings of the caudal head/neck

Additional comments:

The CT findings confirm atlantoaxial subluxation as a cause of the reported clinical signs. This is associated with hypoplastic dens which is a congenital abnormality. Insufficiency of the soft tissues which support the dens (transverse, apical, and alar ligaments) can also contribute to atlantoaxial instability but cannot be assessed with the current images. A focal intra-axial spinal cord lesion secondary to chronic dynamic instability and compression in this region is suspected but cannot be fully confirmed from CT. MRI examination could be considered to evaluate the status of the spinal cord parenchyma at this level (intra axial pathology and/or concurrent syringomyelia, etc) and would be most contributory if sagittal and transverse T2 weighted images, corresponding FLAIR images, and T1 weighted images were included.



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