

“What’s Your Diagnosis?”

Signalment:

Species: Canine

Breed: English Springer Spaniel

Sex: Female Intact

Date of Birth: 04/30/2009

Presenting Complaint:

- Extreme pain on palpation of neck
- rDVM reported dermoid cyst

Physical Examination:

- 1 cm round, raised area of chord like material protruding out of the skin just caudal to head
- Neck is painful on palpation
- No abnormalities in temperature, pulse, respiratory parameters

Diagnostic Plan:

1. Cervical radiographs
2. Cervical MRI
4. PCV/TP
3. Bacterial culture of cervical mass

Diagnostic Findings:

1. PCV - 38
2. TP – 6.2
3. Bacterial culture of cervical mass – Staphylococcus Intermedius sensitive to selected antibiotics

Cervical Radiographs:



Findings of Cervical Radiographs:

Cervical spine, 2 view: There are no soft tissue or osseous abnormalities seen.

Interpretation of Cervical Radiographs:

Unremarkable cervical spine.

Magnetic Resonance Imaging:



Magnetic Resonance Findings:

Three mm T2 weighted fluid attenuation inversion recovery (FLAIR). And pre and post contrast T1 weighted axial and sagittal images were obtained of the caudal head and cervical spine. On T2 weighted images, there is a circumferential hyperintensity surrounding the spinal cord at C1 and C2 that communicates with a narrow tract leading dorsally to the superficial soft tissues at the cranial neck through a dorsal discontinuity in the first cervical vertebra. The hyperintensity suppresses on FLAIR images and was hypointense on T1 weighted images being isointense to cerebrospinal fluid. The spinal cord caudal to this location at caudal C2 and C3 is mildly hyperintense on T2 weighted images.

Magnetic Resonance Interpretation:

Findings are most consistent with congenital meningocele, cervical dermoid sinus tract, and spina bifida at C1.

A dermoid sinus is a cyst-like structure that lies below the skin along the back and may be connected to the spinal canal. During embryonic development, the neural tube that forms the spine should separate completely from the skin. Failure of separation results in a dermoid sinus.

Spina Bifida is fusion of the two halves of the dorsal spinous processes of the vertebrae does not occur during embryonic development. Clinical signs may vary from non clinical to severe. There is no therapy available.

Meningocele is a type of spina bifida in which the spinal cord develops normally but the meninges protrude from a spinal opening

Follow-Up Post Imaging:

Abby was diagnosed with a dorsal cervical dermoid sinus (Pilonidal sinus) with communicating meningocele. Following the MRI, Abby underwent surgical excision of the dermoid sinus with partial meningocele excision and ligation. She is back at home and doing well.