



**PATIENT**

Rugby Heifer

**PRESENTING CLINICAL SIGNS**

reluctant to walk, pyrexia, lethargic, refusing food oedema bilateral hind pain on manipulation L hind  
Abnormal PE/Chem/CBC/UA Results: mild wbc increase/neutrophilia urine concentrated

**SPECIES**

Canine

**COMPUTED TOMOGRAPHIC STUDY OF THE HEAD, NECK, THORAX, ABDOMEN, & PELVIS**

Plain and post contrast studies in soft tissue, bone, and lung windows available for review.

**BREED**

Mastiff X

**COMPUTED TOMOGRAPHIC FINDINGS**

**Head & Neck**

The brain presents no deviation from normal anatomy and symmetry. The grey and white matter distinction and the neuroparenchymal attenuation are as expected. The distribution of contrast enhancement is within normal limits throughout the parenchyma and meninges. The ventricular system is non-dilated and within the limits of the expected volume and symmetry.

**SEX**

MN

Thin and smoothly folded conchae and turbinates with even smooth mucosal lining. The osseous lining of the nasal cavities is intact.

**AGE**

8

Both temporomandibular joints present congruent joint spaces with even subchondral bone surfaces and are considered within normal limits.

**INTERPRETED BY**

Nele Eley, DVM  
Dr. med. Vet. DipECVDI

Both tympanic bullae are aerated, the mucosal lining is not seen, the bony wall is smooth and thin. The external auditory meatuses present within normal limits.

Mild symmetric enlargement of the submandibular and medial retropharyngeal lymph nodes is seen.

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The salivary glands present within normal limits.

The visible dentition is within normal limits.

Number, alignment, and anatomy of the cervical vertebrae present within normal limits.

**REFERRING VET**

Eamon

The axial musculature presents within normal limits.

Both lobes of the thyroid gland present within normal limits.

**INVOICE**

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**Thorax**

T4/5 and T10/11 present mild spondylosis deformans.

The sternal, cranial mediastinal and tracheobronchial lymph nodes are small elongated with a normal short-to-long-axis-ratio is < 0.5, the attenuation and contrast enhancement pattern are uniform and considered within normal limits.

**DATE**

2-15-23

The cardiovascular structures including the pulmonary vasculature are within normal limits.



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The bronchial tree presents with regular branching and tapers uniformly towards the periphery as expected, the bronchial walls are thin and smooth. The bronchus-to-artery ratio is within normal limits.

The lung parenchyma presents the expected architecture and attenuation behavior.

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Canine

Small incidental gas pockets are seen within the esophageal lumen, there is no evidence of abnormal dilation.

**Abdomen**

**BREED**

Mastiff X

The serosal fat presents normal attenuation behavior. There is no evidence of peritoneal effusion or peritonitis.

**SEX**

MN

Both kidneys present within normal limits for size, shape and organ architecture. After contrast administration a bilaterally symmetric and uniform nephro- and pyelogram is noted.

The prostate is small and within normal limits.

The adrenal glands are within normal limits for size, shape and organ architecture.

**AGE**

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Both liver and spleen present with normal shape, even surface, uniformly attenuating parenchyma and homogeneous contrast enhancement, unremarkable.

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The pancreas is evenly contoured, the pancreatic parenchyma is homogeneous and presents uniform contrast enhancement.

The position, delineation, wall and content of the gastrointestinal tract are considered within normal limits throughout.

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Mild enlargement of the right and left medial iliac lymph nodes measuring 4 x 1.5 cm is seen.

**Pelvis**

Severe protrusion of the lumbosacral intervertebral disc is seen with vertebral end plate sclerosis, small permeative vertebral end plate defects, and unsharp new bone formation emerging from the lumbosacral vertebral end plates and vertebral bodies of L7/S1 ventrally as well as laterally. Mild bilateral neuroforaminal stenosis is seen at the lumbosacral junction.

**REFERRING VET**

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The left coxofemoral joint presents evidence of mild dysplasia and mild secondary coxofemoral joint osteoarthritis.

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There appears to be subcutaneous and interfascial fat stranding in the right and left hind limbs which are partially included in the study.

**COMPUTED TOMOGRAPHIC DIAGNOSIS**

**DATE**

2-15-23

- Suspect discospondylitis/spondylitis of the lumbosacral junction with moderate to severe lumbosacral stenosis.
- Mild bilateral medial iliac lymphadenomegaly.
- Bilateral hind limb "edema" (partially included)



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- Mild bilaterally symmetric medial retropharyngeal and submandibular lymphadenomegaly.
- Mild spondylosis deformans T4/5 and T10/11.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

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Canine

The CT findings of the lumbosacral junction reveal moderate to severe vertebral canal stenosis. There also is evidence of chronic osteitis in terms of spondylitis and/or discospondylitis at the lumbosacral junction which may explain the reactive lymphadenomegaly of the medial iliac lymph nodes. It remains uncertain however as to whether the lumbosacral changes are the cause or the consequence of the pathology in the hind limbs, which appears to be associated with edema and/or cellulitis.

**BREED**

Mastiff X

The lymph node changes in the medial retropharyngeal, submandibular, and medial iliac lymph centers are suggestive for reactive hyperplasia/lymphadenitis even though a lymphomatous or other neoplastic infiltrate cannot be ruled out entirely. Consider fine needle aspiration of the lymph nodes to further define.

**SEX**

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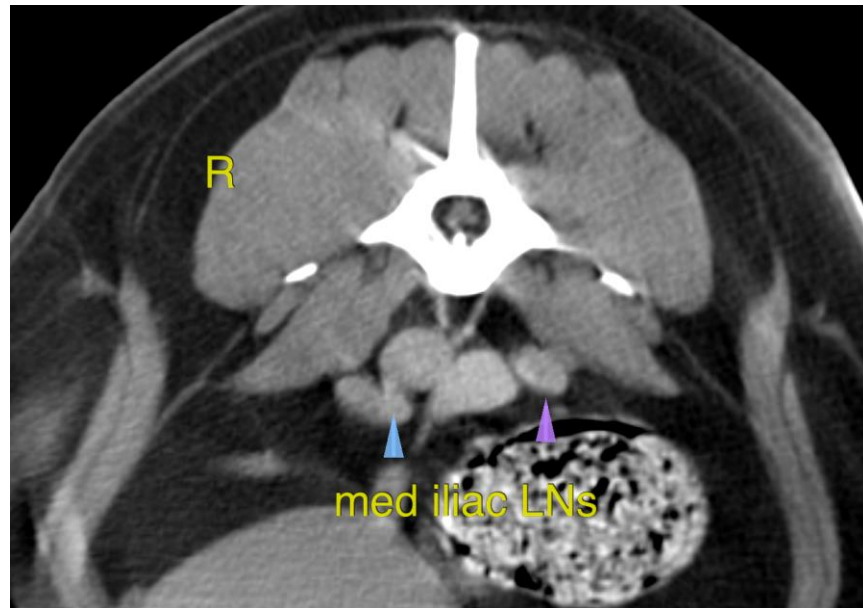
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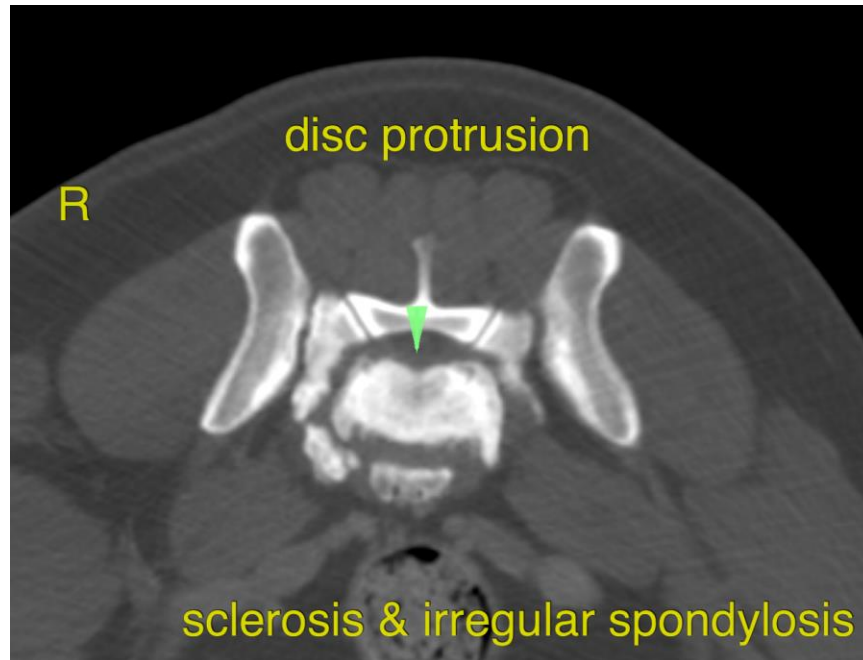
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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