

CT Reporting Service

Report number: 121427			Report date: 05/07/12		
Referring Veterinari	an:				
Referring Practice:					
Email address:					
Owner:			Patient:		
Species: Canine	Breed:	French bulldog	Sex:	Age: 1 yr	
Previous Report Number: None					

Clinical History:

Spine back pain no focus Series C1 to S1 With out contrast and with Myelogram

Number of series (including scouts): 13

Study dated: 4/7/2012

Study received: 5/7/2012

Details of study and technical comments:

CT examination of the entire spine pre and post-myelogram. The spine has been imaged in three sections as shown below. Soft tissue and bone algorithm images are available for all areas. The myelogram was performed via a cervical puncture and is of excellent quality. The study is overall of superb diagnostic quality.

- T12-sacrum
- C5-T12
- Caudal fossa to C6

Diagnostic interpretation:

(Note that it is not possible to be completely certain that 13 thoracic vertebra are present as the last rib is not included in the thoracic series, vertebral numbering in this report should therefore be interpreted with caution).

<u>Survey</u>

There are many vertebral abnormalities present:

T4 is a hemivertebra with a wedge-shaped (viewed laterally) short butterfly vertebral body.

T5 has a misshapen trapezoid (viewed laterally) vertebral body

T7 is a butterfly vertebra with a short vertebral body

T8 is extremely shortened and the left vertebral body is almost entirely absent

T9 is markedly rotated due to the asymmetry in T8 and this results in focal scoliosis

- T10 is very asymmetric and the right side of the vertebral body is almost entirely absent
- T11 is a butterfly vertebra and is very short
- L1 is transitional and shows a rib on the left side

These changes have resulted in focal kyphosis and lordosis at T4/5 and marked scoliosis and moderate kyphosis at T9-11.

In addition the apposing endplates on the left side of T10 and T11 are irregular and show areas of lysis (figure 3). The disc space is extremely narrowed here and at many sites it is not possible to be sure whether a true disc is present or not.

The region of the caudal oesophagus/oesophageal hiatus is enlarged and shows soft tissue/fluid content. This is suspicious for a sliding hiatal hernia.

<u>Myelogram</u>

There are mild mineralised disc protrusions in the thoracolumbar spine at T12/13, T13/L1, L5/6-L7/S1 but none are associated with significant cord compression.

The myelogram shows attenuation of the right ventrolateral aspect of the contrast column within the region of scoliosis from T10-11. The remainder of the myelographic study is normal.

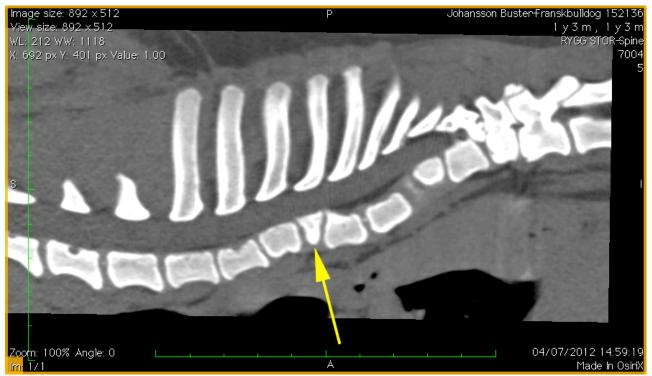


Fig1 The yellow arrow shows the wedge/butterfly vertebra at T4. Note that there is no significant cord compression at this level.

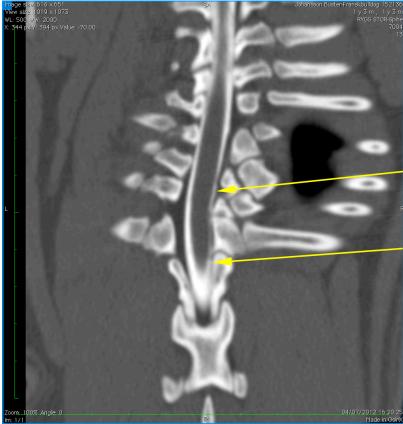


Fig 2 Mild right-sided compression is present within T10-T11 (shown between the yellow arrows) at the site of scoliosis.

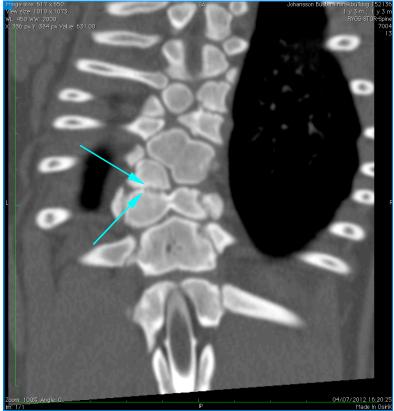


Fig 3 Blue arrows show the irregular apposing endplates at T10/11 on the left side



Fig 4: 3D reconstruction of the ventral aspect of the thoracic spine

Conclusions:

- 1. Multiple vertebral malformations as described. These are typical for the breed
- 2. Mild right sided ventrolateral cord compression within T10-11 at the site of marked scoliosis
- 3. Multiple thoracolumbar disc protrusions but with no evidence of cord compression
- 4. Suspected discospondylitis/spondylitis at T10/11 left side
- 5. Suspected sliding hiatal hernia

Additional comments:

The most significant findings are the irregular endplates at T10/11. This appearance could be associated to chronic wear and the absence of a disc at this site, but I am concerned that this might represent a site of discospondylitis. The compression at T10/11 may also be contributing to the clinical signs and the degree of cord compromise may progress as the animal ages.

Reporting Radiologist:

RCVS and European Specialist in Veterinary Diagnostic Imaging

If you have any queries regarding this report then please contact the reporting radiologist on the above email address or contact <u>info@vetctspecialists.com</u>