

CT Reporting Service

Report number: 121422			Report date: 05/07/12	
Referring Veterinaria	an:			
Referring Practice:				
Email address:				
Owner:		Patient:		
Species: Canine	Breed: Rottweiler	Sex: MN		Age: 4 yrs
Previous Report Number: None				

Clinical History:

Acute onset of a subcutaneous swelling cranial thoracic wall caudo-distal scapular area first noticed beginning of June. No lameness and Dennis is currently well. Incisional biopsy by referring vet reported as sarcoma, probably fibrosarcoma.

Specific questions to be answered by this imaging study:

1 – anatomic location and extent of the primary tumour

2 - evidence of pulmonary/abdominal metastases

Number of series (including scouts): 7

Study dated: 05-07-2012

Study received: 06-07-2012

+44 (0) 1223 422251 info@vetctspecialists.com www.vetctspecialists.com

Details of study and technical comments:

A CT study of the thorax and abdomen is available for interpretation. The study consists of the following series:

- Thorax: precontrast series processed with lung and soft tissue filters and immediate and delayed postcontrast series. All the series have 1.25 mm thick slices.
- Abdomen: proximal and postcontrast series processed with a soft tissue filter and 1.25 mm slices.

The study is of very good quality.

Diagnostic interpretation:

Thoracic wall mass:

There is a large soft tissue mass on the left side of the thorax extending from the thoracic inlet to the seventh intercostal space. The mass shows heterogeneous contrast enhancement with some hypoattenuating areas, which most likely contain fluid or necrotic tissue, and multiple tortuous vessels consistent with neovascularization. Some of these tortuous vessels extend cranially and communicate with the subclavian vessels (The image below is a thick slab MIP multiplanar reconstruction showing the vasculature of the area. The red arrows indicate the location of the mass).

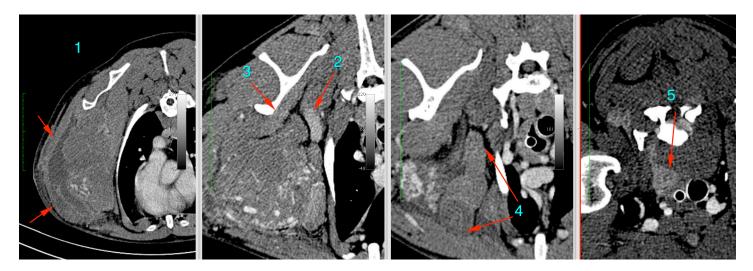


The mass lies between the following muscles:

- Laterally the latissimus dorsi, which is irregular and contrast enhances in its cranial location, suggesting neoplastic infiltration (image below, 1)
- Dorsomedially the mass is lateral to the serratus. The serratus has patchy areas of increased contrast enhancement, which are also suspicious for neoplastic infiltration (image below, 2).
- Dorsolaterally the mass contacts the infrascapularis, which is otherwise normal (3)
- Medially the mass contacts the ribs and the intercostal muscles, but there is no evidence of infiltration of these structures.

+44 (0) 1223 422251 info@vetctspecialists.com www.vetctspecialists.com

- Caudally the mass is ill-defined and is surrounded by streaks of fluid or soft tissue that extend between the latissimus dorsi and the thoracic wall up to the level of the 8th intercostal space.
- Cranially the mass infiltrates the scalenus muscle (4) and there is contrast enhancement extending cranially along this muscle and extending in to the longus colli muscle (5). This can be seen ventral and to the left of C6-C7.
- The cranial border of the mass is ill-defined elsewhere. There are streaks of fluid that partially surround the brachial plexus and subclavian vasculature. These could represent transudate, haemorrhage or neoplastic infiltration.



Thorax:

The pulmonary parenchyma is unremarkable. The cardiovascular structures are within normal limits. The mediastinal and tracheobronchial lymphnodes are normal.

There are multiple foci of calcification in the tendons of both supraspinatus muscles. This is more severe on the right side, where multiple calcified structures are seen. T13 has an aberrant transitional process extended by a rib and there are only 6 lumbar vertebrae. The rest of the musculoskeletal structures, including the ribs adjacent to the soft tissue mass are normal.

Abdomen:

Two small hypoattenuating nodules are seen in the right middle and right lateral lobes of the liver. These nodules do not enhance significantly after contrast administration.

Mild lumbosacral intervertebral disc protrusion and spondylosis. No evidence of significant cauda equina compression.

Conclusions:

- Large infiltrative thoracic wall soft tissue mass with evidence of neovascularization. The appearance is consistent with the diagnosed sarcoma.
- Bilateral calcifying supraspinatus tenosynovitis.
- Two small hepatic nodules. These are most likely incidental, but the possibility of metastasis cannot be fully excluded. Monitoring the progression would be the best way to assess if these are neoplastic in origin or not.
- No evidence of metastatic spread from the soft tissue sarcoma.
- Transitional thoracolumbar vertebra. Incidental.

Additional comments:

It is not always possible to differentiate between neoplastic infiltration of peripheral tissues and reactive or inflammatory changes. However, considering that the mass has already been confirmed as a sarcoma, and that some areas have clear signs of infiltration (i.e. scalenus m.), complete resection of the mass with margins is unlikely to be achieved.

If you require further anatomical information about the margins of the mass do not hesitate to contact me directly.

Reporting Radiologist:

European Specialist in Veterinary Diagnostic Imaging Consultant for Vet CT Specialists

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>

+44 (0) 1223 422251 info@vetctspecialists.com www.vetctspecialists.com