

# **REPORTING SERVICE: MRI**

Report number: VETCT-81564		Report date: 22/06/2017	
Referring Veterinaria	an: xxxxxx		
Referring Practice: x	XXXXX		
Email address: xxxxx	х		
Owner: xxxxx	Patient: xxxxx		
Species: Equine	Breed: Warmblood	Sex: Male Neutered	Age: 8 years
Associated cases:			

**Clinical History:** 

Left forelimb lameness blocks to PD

Questions to be answered:

Number of series / images: 14 / 251

Study dated: 22/06/2017

Study received: 22/06/2017

Anatomic regions: Carpus/foot

Details of study and technical comments: MRI left front foot. Images are of good diagnostic quality.



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## Diagnostic interpretation:

- A core lesion involving the dorsal portion of the lateral lobe of the deep digital flexor tendon extends from the level of the mid portion of the middle phalanx to its insertion. The lesion is hyperintense in all sequences and there is dorsal bulging of the lobe at the level of the navicular bursa. The lesion is small in cross sectional area but the proximal to distal length is approximately 4.5cm.
- The navicular bursa is moderately distended. The medial aspect of the bursa is filled with hyperintense material in T1W sequences and has lost its normal fluid signal intensity in T2W FSE and STIR sequences. The margins of the bursa are irregular and thickened.
- The tendon lesion is in close relationship with the palmar border of the navicular bone; there are mild endosteal irregularities affecting the medial aspect of the palmar compact bone of the navicular bone. The palmar compact bone has mild increased STIR signal intensity which is more diffused, extending dorsally, on the medial side while remain linear and confined to the cortex laterally. There is remodelling of the proximomedial aspect of the navicular bone in the region of insertion of the collateral sesamoidean ligament.
- Distal to the navicular bone the tendon lesion is difficult to separate from the palmar border of the distal sesamoidean impar ligament; a hyperintense area, continuous with the tendon lesion proceeds dorsally into the full thickness of the distal sesamoidean impar ligament. The ligament is markedly enlarged axially and the palmar border is difficult to delineate. the synovial invaginations within the body are poorly visualized. The palmar border is markedly irregular.
- There are extensive abnormalities affecting the body of the distal phalanx, extending dorsally from the facies flexoria. A large area of low T1W signal intensity; intermediate T2\*W GRE signal intensity and moderately hyperintense STIR signal intensity is visible in this location. The abnormal signal intensity extends toward the palmar subchondral bone of the distal interphalangeal joint but this seems not affected at this stage.
- Irregularly shaped hyperintense linear structures penetrate the dorsal cortex of the distal phalanx and extends into the body in the direction of the bone lesion described. These likely represents vascular structures.
- Diffused hypointense signal is visible in the medial palmar process of the DP in GRE sequences.



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transverse T2WFSE and T1W GRE sequences proximal to the navicular bone showing the deep digital flexor tendon lesion (arrow) and the reaction in the navicular bursa (arrowheads).



transverse T2\*W GRE distal to the navicular bone showing the abnormal size and marginations of the distal sesamoidean impar ligament (arrowheads) and the tendon lesion (arrow).



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Transverse T2\*W GRE and sagittal STIR showing the abnormal signal intensity in the distal phalanx (arrows); and the vascular structures penetrating the dorsal cortex (arrowheads). Note also the mild hyperintense signal in the navicular bone in B.

# Conclusions:

- Severe entesopathy of the distal sesamoidean impar ligament and deep digital flexor tendon insertion characterised by bone oedema like signal intensity.
- Acute/subacute deep digital flexor tendonitis affecting the medial lobe of the deep digital flexor tendon. There are likely adhesions between the deep digital flexor tendon and both the navicular bone and the distal sesamoidean impar ligament.
- Distal sesamoidean impar ligament desmopathy
- Navicular bursitis secondary to the deep digital flexor tendon lesion. the tissue identified in the bursa is compatible with granuloma formation or fibrous tissue.
- Mild navicular bone disease affecting the palmar compact bone of the navicular bone; also secondary to the deep digital flexor tendon lesion.



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#### Additional comments:

The lesion affecting Ollie's left foot are severe and affect multiple structure of the podotrochlear apparatus.

## **Reporting Radiologist:**

xxxxxx DVM, PhD, DipECVDI, MRCVS European Specialist in Veterinary Diagnostic Imaging RCVS Specialist in Veterinary Diagnostic Imaging

If you have any queries regarding this report then please "Add a comment" on the VetCT platform or contact info@vet-ct.com



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