



## REPORTING SERVICE: XR

Report number: VETCT-70603

Report date: 04/04/2017

Referring Veterinarian: xxxxx

Referring Practice: xxxxx

Email address: xxxxx

Owner: xxxx Patient: xxxx

Species: Equine Breed: Belgian Warmblood Sex: Unknown Age: 8 years

Associated cases:

### Clinical History:

Pre-purchase radiographs.

### Questions to be answered:

Number of series / images: 65 / 66

Study dated: 03/04/2017

Study received: 04/04/2017

Anatomic regions: Stifle, Tarsus/foot, Pelvis/hips

### Details of study and technical comments:

Right/left front feet: LM, DPa, DPrPaDiO x2.

Right/Left hind feet: LM views, shoes on.

Right/left front and hind fetlocks: LM, flexed LM, DP, DMPaLO and DLPaMO. Images are of diagnostic quality; LM views of the metatarsophalangeal joint are moderately oblique.



Reported by VetCT

t. (UK) +44 (0)1223 422251 t. (Australia) +61 (0)8 9336 7632 www.vet-ct.com e. info@vet-ct.com

Co Number 6955449 Registered Office in UK St John's Innovation Centre Cowley Road Cambridge CB4 0WS UK

ABN 24601862220 Registered Office in Australia Suite 11, 185-187 High Street Fremantle WA 6160 Australia

This report is based on the available history and radiographic interpretation only and not on a physical examination of the patient. It must therefore only be interpreted by a currently licensed and registered veterinary surgeon responsible for the care of this patient.

Left and right tarsus: LM, DPI, DLPIMO and DMPILO.

Left and right stifle: LM, CdCr, CdLCrMO. Images of the right stifle are slightly moved.

Spinous processes: LL of thoracic spine

### Diagnostic interpretation:

Front feet:

- Bilaterally the toe is very long and overgrown. The line extending distally from the centre of rotation of the distal interphalangeal joint reaches the sole at the junction between its mid and palmar third; which more palmar than expected.
- The angle between the solar margin of the distal phalanx and the sole (palmar angle) is negative, with the palmar processes of the distal phalanx being positioned more distally within the sole than the tip of the distal phalanx. The angle of rotation is LF= -7 degrees; RF= -4 degrees.
- There is mild mediolateral imbalance of the distal phalanx but this might be exacerbated by positioning. The medial hoof wall in the left foot is concave in its proximal third.
- A large smoothly margined enthesophyte is visible at the proximal lateral border of the left navicular bone in the region of insertion of the lateral collateral sesamoidean ligament; a similar but smaller lesion is visible in the right limb. Multiple elongated synovial invaginations are visible at the distal horizontal border of the left navicular bone.

Front fetlocks:

- Slight irregularity at the insertion of the lateral oblique sesamoidean ligament on the right proximal phalanx. This is likely incidental.

Hind feet:

- Bilaterally long toe and palmar displacement of the centre of balance of the distal interphalangeal joint.
- The palmar angle is negative in the right foot, measuring – 5 degrees, and flat in the left foot.

Hind fetlocks:

- A short lucent line is visible at the sagittal groove of the proximal phalanx bilaterally. The lucent region is 3mm long. The subchondral bone at the sagittal groove is slightly thickened and has irregular margins bilaterally.
- Distal to the thickened subchondral bone 3 elongated parallel lucent regions are visible in the left proximal phalanx, likely representing enlarged vascular channels.

Hocks:

- A tiny spur is visible on the dorsoproximal aspect of the third metatarsal bone. these spurs have been seen both in lame and non-lame horses and their significance is questionable (Faiburn 2010 EVJ)

Stifles:

- No abnormalities detected.

Thoracolumbar spine:



Reported by VetCT

t. (UK) +44 (0)1223 422251 t. (Australia) +61 (0)8 9336 7632 www.vet-ct.com e. info@vet-ct.com

Co Number 6955449 Registered Office in UK St John's Innovation Centre Cowley Road Cambridge CB4 0WS UK

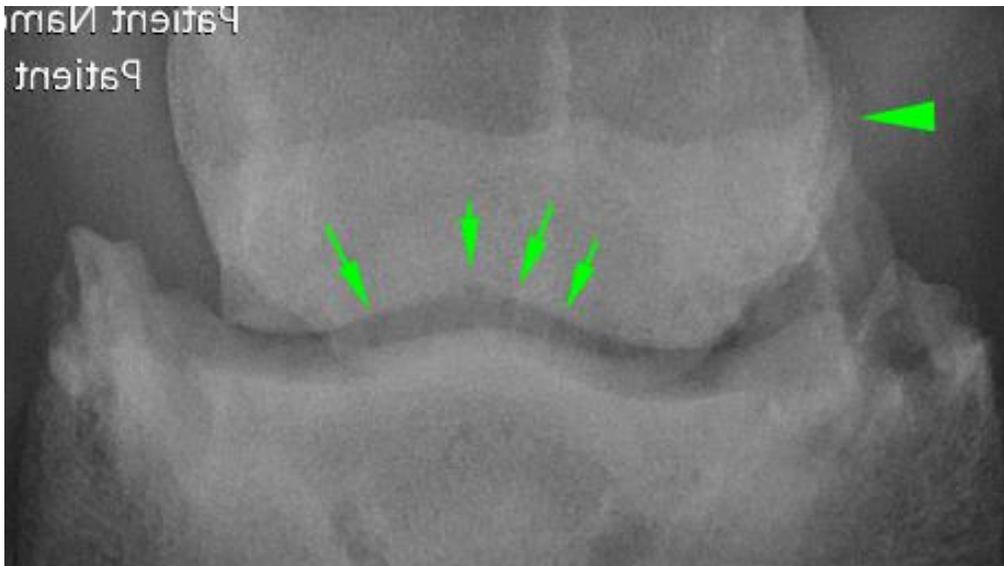
ABN 24601862220 Registered Office in Australia Suite 11, 185-187 High Street Fremantle WA 6160 Australia

This report is based on the available history and radiographic interpretation only and not on a physical examination of the patient. It must therefore only be interpreted by a currently licensed and registered veterinary surgeon responsible for the care of this patient.

- Two close spinous processes in the caudal thoracic spine, likely T15-16. No changes in opacity are identified in these processes in these radiographs.



LM view of the left front foot showing the reverse palmar angle (bars) the long toe (arrow) and the large enthesophyte on the proximal border of the navicular bone (arrowhead).



DPrPaDiO view of the left front foot: large enthesophyte at the proximal lateral aspect of the navicular bone (arrowhead) and elongated synovial invaginations (arrows).



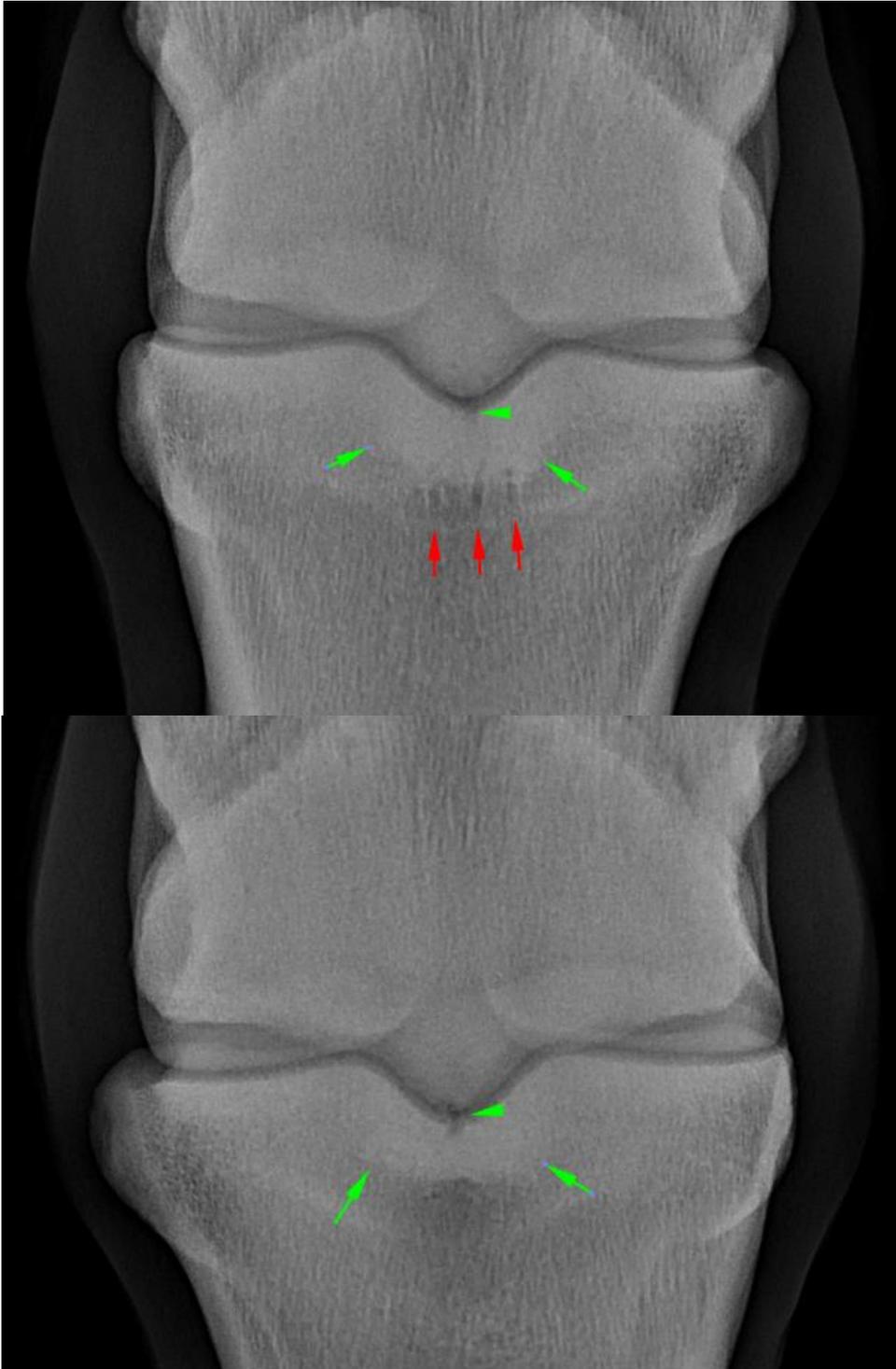
Reported by VetCT

t. (UK) +44 (0)1223 422251 t. (Australia) +61 (0)8 9336 7632 www.vet-ct.com e. info@vet-ct.com

Co Number 6955449 Registered Office in UK St John's Innovation Centre Cowley Road Cambridge CB4 0WS UK

ABN 24601862220 Registered Office in Australia Suite 11, 185-187 High Street Fremantle WA 6160 Australia

This report is based on the available history and radiographic interpretation only and not on a physical examination of the patient. It must therefore only be interpreted by a currently licensed and registered veterinary surgeon responsible for the care of this patient.



DPI view of the left and right hind fetlocks showing the small axial lucent region in the proximal phalanx (arrowhead) and the subchondral bone remodelling described (arrows).



Reported by VetCT

t. (UK) +44 (0)1223 422251 t. (Australia) +61 (0)8 9336 7632 www.vet-ct.com e. info@vet-ct.com

Co Number 6955449 Registered Office in UK St John's Innovation Centre Cowley Road Cambridge CB4 0WS UK

ABN 24601862220 Registered Office in Australia Suite 11, 185-187 High Street Fremantle WA 6160 Australia

This report is based on the available history and radiographic interpretation only and not on a physical examination of the patient. It must therefore only be interpreted by a currently licensed and registered veterinary surgeon responsible for the care of this patient.

## Conclusions:

- Poor foot balance especially in the front feet characterised by reversed palmar angle.
- Subchondral bone lucency and remodelling bilaterally in the proximal phalanx in the hind limbs.
- Enthesopathy lateral collateral sesamoidean ligament bilateral worse in the left limb and mild navicular bone changes at the distal border in the left limb.
- Close spinous process T16-17.

## Additional comments:

The very long toe in xxxx's feet suggests non-recent trimming and the poor balance might be partially improved by corrective shoeing. Reduction of the palmar angle increases the load of the deep digital flexor tendon and might predispose to injury. Negative palmar angle in the hind feet is often observed and the effect of this finding on the biomechanics of the foot is not well understood.

Lucent areas in the proximal axial aspect of the proximal phalanx have been associated with abnormal remodelling of the bone secondary to overload and trauma. These lesions have been described in horses with lameness localized to the fetlock and when examined using MRI larger areas of subchondral bone remodelling have been identified in the proximal phalanx compared to what could be observed on radiology only (Dyson et al VRU 2011). This finding should be interpreted based on the result of a clinical examination and expected use for this horse. Further information about the extent of this lesion can be obtained using MRI.

## Reporting Radiologist:

xxxxx 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](mailto:info@vet-ct.com)



Reported by VetCT

t. (UK) +44 (0)1223 422251 t. (Australia) +61 (0)8 9336 7632 www.vet-ct.com e. info@vet-ct.com

Co Number 6955449 Registered Office in UK St John's Innovation Centre Cowley Road Cambridge CB4 0WS UK

ABN 24601862220 Registered Office in Australia Suite 11, 185-187 High Street Fremantle WA 6160 Australia

This report is based on the available history and radiographic interpretation only and not on a physical examination of the patient. It must therefore only be interpreted by a currently licensed and registered veterinary surgeon responsible for the care of this patient.