

Signalment & History

- * 12 year old Warmblood gelding used for upper level show jumping
- * Acute left forelimb (LF) lameness
- * National Show Jumping event in 45 days, requiring soundness

Initial Lameness Examination:

Examination:

- * 2/5 lame LF (flat trot), exaggerated in left circle, 1+/5 lame LF (soft ground)
- * Palpable coffin joint effusion (LF)
- * No response to hoof testers; 2/5 positive to distal limb flexion (LF)

Perineural anesthesia:

- * PDNB LF-80% improvement, Abaxial LF: Sound on all footing

Radiology:

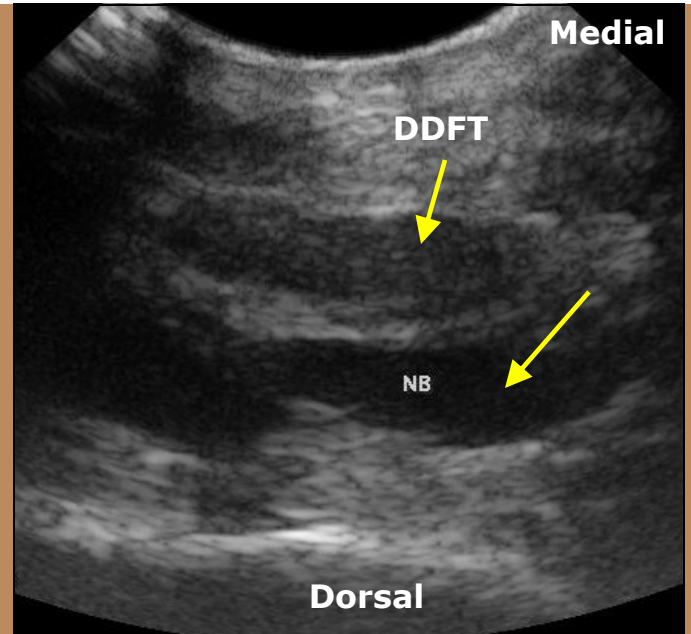
- * No significant findings

Ultrasound: LF Palmar Pastern Region:

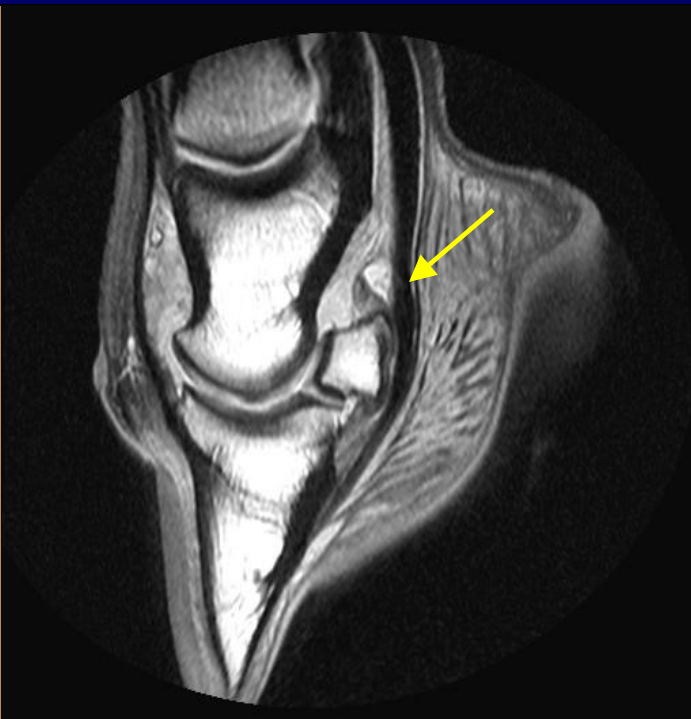
- * Marked effusion and synovial thickening of the navicular bursa (NB).
- * Subtle dorsal border fraying of the deep digital flexor tendon (DDFT) near the NB.

Case Recommendation:

- * MRI: Left foot, limited left front pastern



Above: Ultrasound image of the Navicular bursa showing marked effusion and bursitis (yellow arrow) Below: Sagittal PD image showing dorsal margin fraying DDFT (yellow arrow)



MRI Findings

Left Forelimb:

- * Moderate chronic navicular bursitis
- * Dorsal margin tear with parasagittal fissure (DDFT, medial lobe)
- * Moderate arthrosis (Coffin Joint) - Periarthritic osteophyte formation

Conclusions:

- * Navicular bursitis—likely the most significant contributor to the lameness
- * DDFT lesions also significant and should be monitored with ultrasound over time
- * Due to severity of navicular bursitis—multiple treatments may be needed to achieve soundness

Treatment Plan:

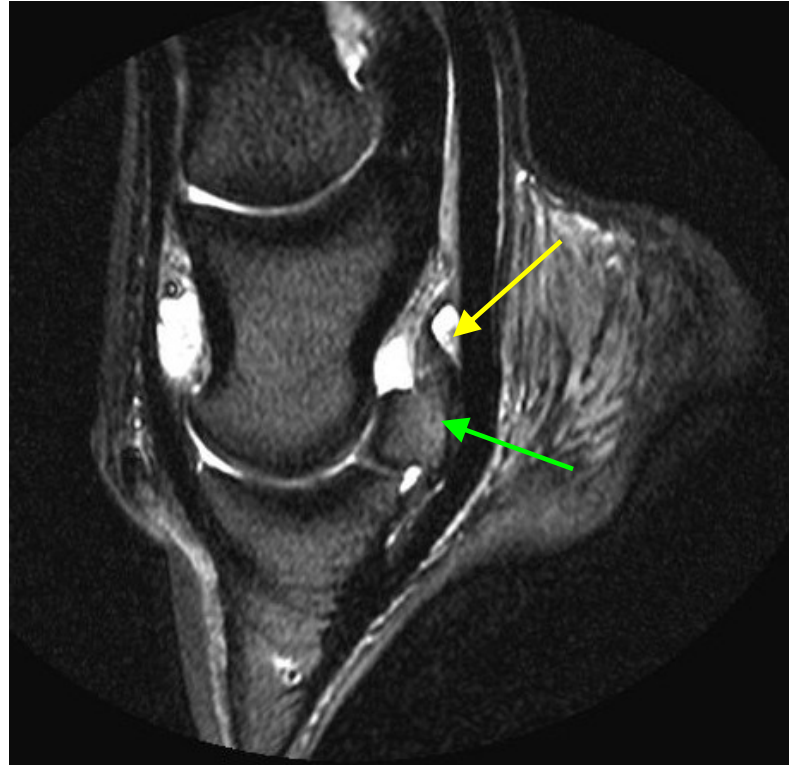
- * Inject LF Coffin Joint and NB—(11mg HA with 9mg Triamcinolone) into each

Recheck Examinations: 3 weeks

- * No evidence of lameness on hard or soft ground
- * U/S: Marked improvement in navicular bursa effusion
- * No treatment was indicated

5 weeks:

- * 1+/5 lame LF
- * Inject LF Coffin Joint and NB—(as above)
- * Subsequently competed very well at the national show-jumping competition



Top: Sagittal STIR image of navicular bursa effusion with moderate bursitis (yellow arrow)
Bone edema: Navicular Bone (green arrow)

Bottom: Axial STIR image of navicular bursa effusion and moderate bursitis (yellow arrow)



Recheck Examinations: (cont'd)

12 weeks post MRI:

- * Two weeks after show, 2/5 lame on the LF, exaggerated on hard ground.
- * Coffin joint anesthesia—5 mins later— 90% improvement in LF lameness.

Ultrasound:

- * Moderate Navicular bursa effusion, worse than two previous exams.

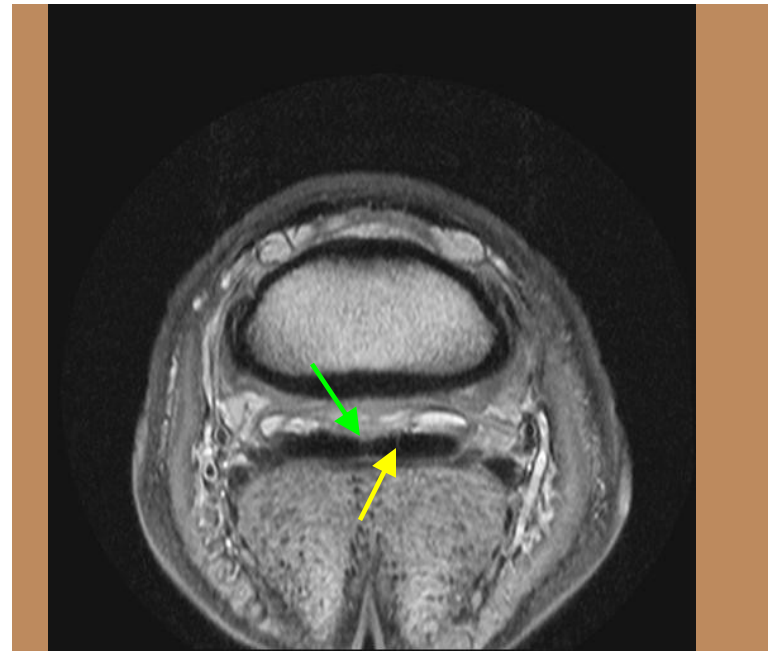
Treatment Plan:

Injections:

- * IRAP (series of three— two weeks apart) into LF coffin joint and NB.
- * Platelet Rich Plasma injection into DDFT (mid pastern).
- * 3 months stall rest with daily handwalking.

Case Progression

- * The findings on MRI examination coupled with successful treatment allowed patient to compete in upper level show jumping using conventional injections (triamcinolone and HA).
- * The refractory lameness assumed to originate from the coffin joint and/or the NB due to the blocking pattern was treated with 3 IRAP injections 2 weeks apart
- * Lameness continued to be refractory for approximately 6 weeks despite IRAP injection.



Above: Axial PD image of the LF with parasagittal tear of the DDFT (yellow arrow) with associated dorsal margin fraying and fibrillation (green arrow).

Repeat Lameness Examination:

Examination:

- * 2/5 lame LF (flat trot), exaggerated in right circle

Perineural anesthesia:

- * Tendon sheath block: No improvement
- * PDNB LF-90% improvement

Conclusion:

- * The change in blocking pattern versus previous examinations indicates a likely change in primary lesion

Recommendation: Repeat MRI examination

Repeat MRI Findings:

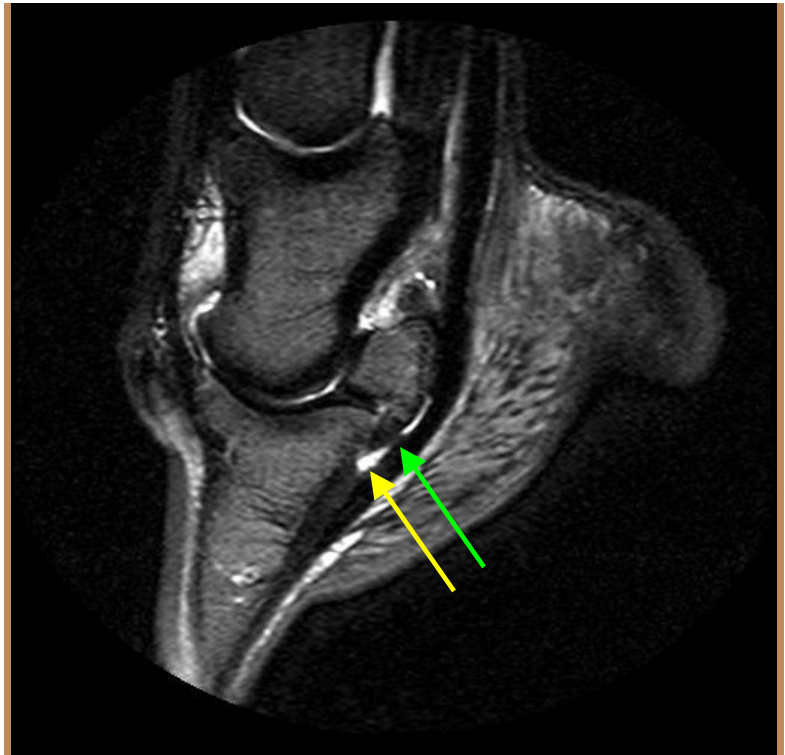
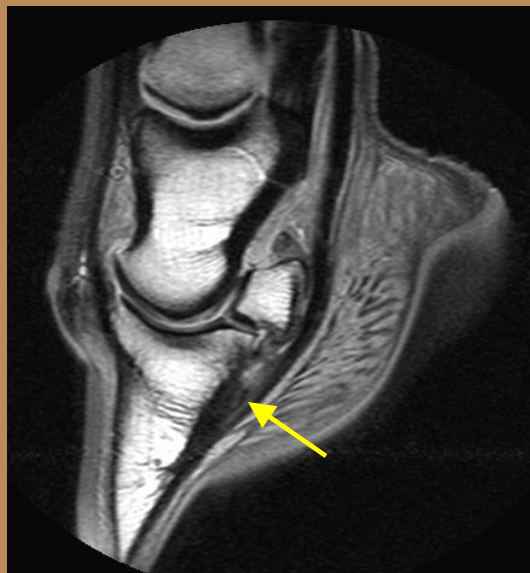
- * Diffuse fluid accumulation and/or bone loss of the Distal Phalanx (P3)
- * Moderate degenerative injury DDFT at its insertion
- * Moderate bursitis (distal recess) NB: corresponding to lesions in the DDFT and P3

Conclusions:

- * It is likely the DDFT injury as well as associated damage to P3 are the most significant lesions

Treatment:

- * DDFT insertional lesion—PRP injection, P2 Bone contusion: Tildren bolus (IV)
- * Isoxsuprine: 60 day therapy
- * Exercise: 30 days stall rest with daily hand-walking followed by 60 days of aquatred therapy (3 days/week).



Above: Sagittal STIR image showing bursitis and effusion of the distal recess of the Navicular Bursa (yellow arrow) with adhesion formation (green arrow)

Left: Saggital PD image of degenerative injury to the DDFT (yellow arrow)

For more information about Pioneer's MRI or to refer a case, feel free to contact Dr. Luke Bass at Pioneer Equine Hospital, Inc.

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