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 subtle dorsal border fraying of the deep digital flexor tendon (DDFT) near the NB.

**Case Recommendation:**

* MRI: Left foot, limited left front pastern

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**MRI Findings**

**Left Forelimb:**
* Moderate chronic navicular bursitis
* Dorsal margin tear with parasagittal fissure (DDFT, medial lobe)
* Moderate arthrosis (Coffin Joint) - Periar- ticular osteophyte formation

**Conclusions:**
* Navicular bursitis—likely the most signifi- cant 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
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.

Recheck Examinations: (cont’d)

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

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

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

Left: Sagittal 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.

**Pioneer Equine Hospital, Inc.**

11536 Cleveland Ave
Oakdale, CA 95361
(209) 847-5951
(209) 847-5954—Fax
lbassdvm@pioneerequine.com

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