

### Signalment & History

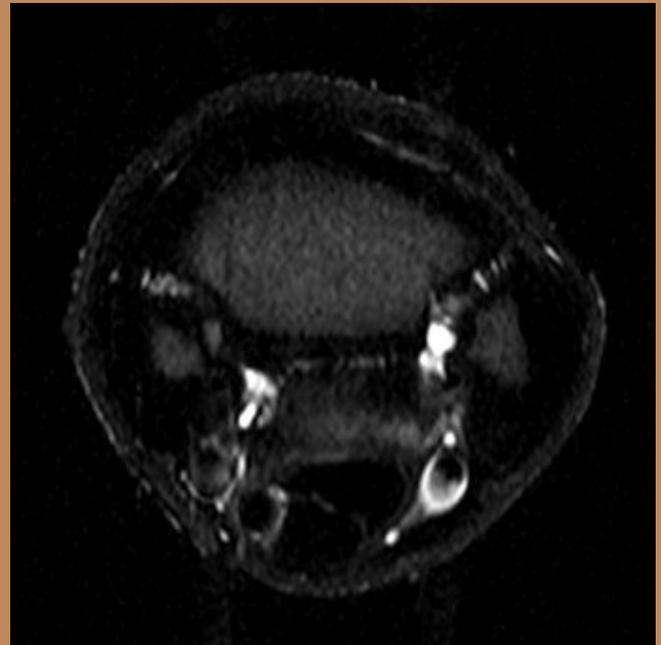
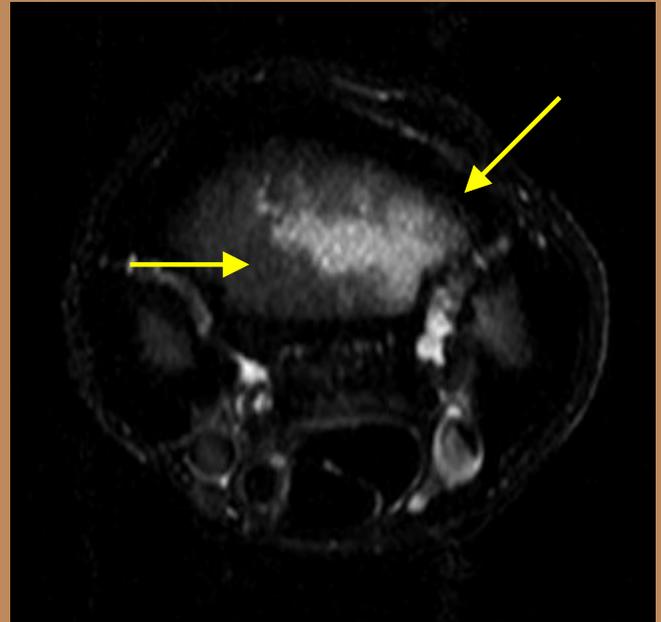
- \* 3 year old QH stallion used for reining.
- \* MRI in 12/09 diagnosed proximal MC III edema/contusion with no associated suspensory ligament injury.
- \* Therapy: Tildren (IV), stall rest, recheck MRI in 60 days.
- \* Recheck MRI completed in 2/10.

### MRI Findings on recheck exam

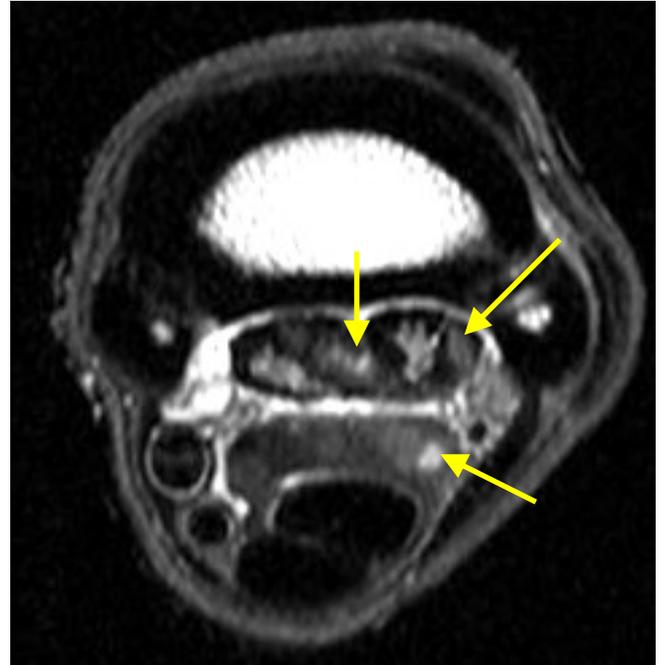
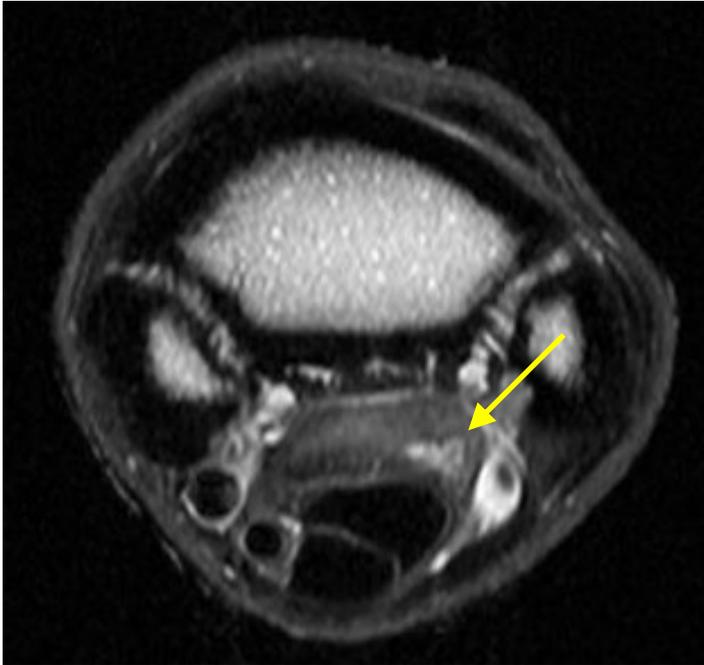
- \* The rapid resolution of the fluid - most consistent with uncomplicated contusion.
- \* Degenerative injury with enlargement in the check ligament starting at distal carpal bones extending distally. Focal fiber disruption—lateral aspect.
- \* Diffuse degenerative injury with enlargement in suspensory ligament distal to CMC joint and extending distally.
- \* The abnormalities are likely the result of the previous injury, but not manifested as a change in signal intensity at the time of the previous study. The abnormalities then progress over time despite rest.
- \* Therapeutic Plan: Platelet rich plasma was ultrasound guided into both suspensory and check ligament lesions, stall rest for 60 days and recheck ultrasound.

For questions and comments, or to remove your name from our mailing list, email [pioneerequine@gmail.com](mailto:pioneerequine@gmail.com).

### MRI Case Study 3



**Top: Axial STIR image (12/09) demonstrating moderate amount of fluid in medial aspect of proximal third metacarpal ; Bottom: Same image at recheck MRI on 2/10.**



### MRI Case 4

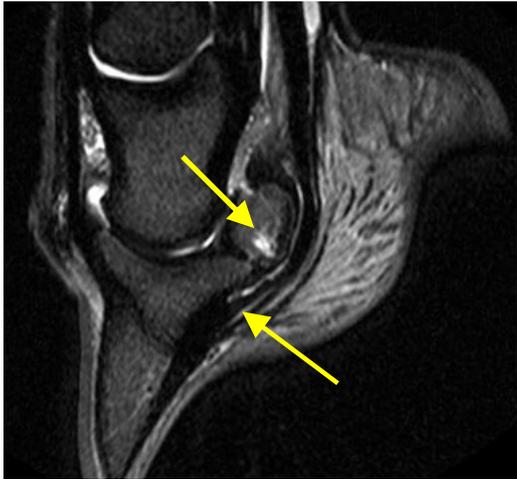
- \* 7 year old paint mare used for western pleasure.
- \* (2/1/10) -Grade 1/5 RF lame to left, 2/5 RF lame straight and 3/5 RF lame to right. Shod with egg bar aluminum shoe with full wedge pads in both front. Blocked to RF PD on past exams by rDVM.
- \* RF DIP joint block: After 8 mins, 80% improvement, slight LF lameness. RF PD block— No change in lameness. DIP joints medicated with steroid and HA.
- \* Patient had recently been shod. Return in 3 weeks for radiographs and shoeing.
- \* Recheck—No improvement.
- \* RF radiographs - Medullary sclerosis of the navicular bone (N.B.). Broken coffin axis present bilaterally.

**Top: Axial PD image showing degenerative injury to check ligament; Bottom: Axial PD image indicating diffuse injury and enlargement of the suspensory ligament and presence of injury to check ligament.**

### MRI Findings (images on next page)

- \* RF— Core lesion with degenerative injury with fiber disruption (DDFT) beginning at proximal phalanx and extending distally.
- \* RF— Focal fiber disruption of DDFT distal to navicular bone, medial to midline.
- \* RF— Adhesions between navicular bursa and DDFT, confirmed by bursal distension.
- \* LF—Mild to moderate fluid in the dorsal lateral distal aspect of middle phalanx, consistent to contusion.
- \* Moderate Chronic Bursitis, Navicular Bursa, Right and Left Fore

### Therapeutic Plan



- \* RF bursal distension during MRI to evaluate potential DDFT-navicular bursa adhesions. Medicated navicular bursa with steroid and HA.
- \* Injection of RF DDFT lesion with PRP (platelet rich plasma) assisted with radiographic guidance.
- \* Corrective shoeing—Application of aluminum wedge shoes with additional 2 degree pads on both front feet.
- \* Stall rest with handwalking (5 mins twice daily for 2 weeks, then 10 mins twice daily until reexamined in 6 weeks).
- \* Phenylbutazone –One gram BID for 2 days and then 1 gram every 24 hours for 7 days.

**Top: RF (SAG STIR) demonstrating focal fiber disruption of DDFT distal to N.B. and N.B. cystlike lesion with focal fluid in trabecular bone; Middle: LF (SAG STIR) indicating fluid in dorsal lateral distal P2. Bottom: Radiographic guided injection of PRP into DDFT lesion after corrective shoeing.**

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

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