

Ultrasonographic Examination of the Fetlock Region and Some Selected Clinical Concerns

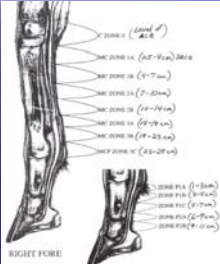
Indiana Association of Equine Practitioners- November 2012

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Ultrasonography of Fetlock Region

- Can visualize and assess many tissues
 - Bone, ligaments, tendons, cartilage
- Practical region of examination
- Requires a firm understanding of anatomy
- Systematic evaluation helpful



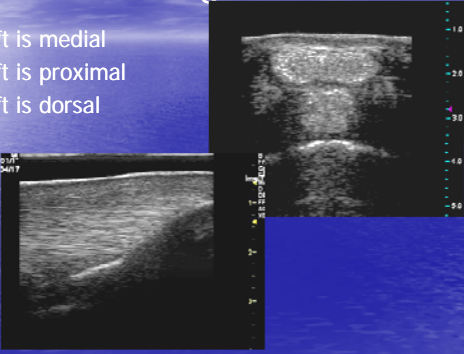
Ultrasonography of Fetlock Region

- Linear probe
- 7.5-10 mHz
- Standoff pad
- Depth- 2-4cm
- Examination
 - Dorsal aspect
 - Lateral, Medial aspect
 - Palmar, Plantar aspect



Ultrasound Image Orientation

- Left is medial
- Left is proximal
- Left is dorsal

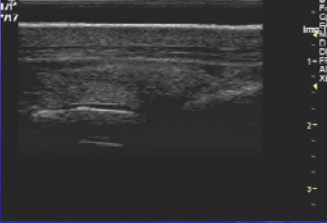



Dorsal Aspect of Fetlock

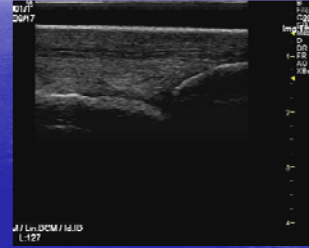
- Bone
 - MC/MT, P1
- Tendon
- Joint
 - Synovium, effusion, cartilage



Dorsal Aspect



Dorsal Aspect

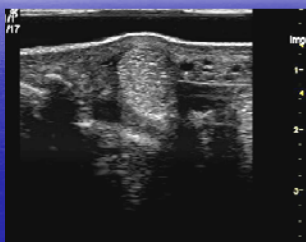


Lateral/Medial Fetlock


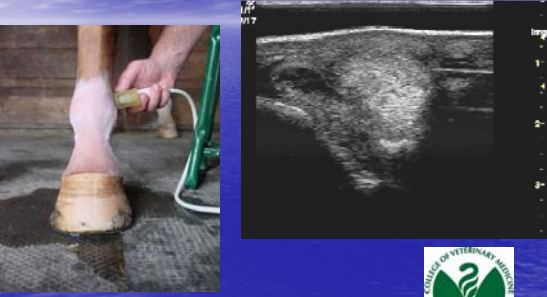
- Bone
 - MC/MTs, Sesamoids, P1
- Ligaments
 - BSL, DCL, CL, OSL, SSL
- Tendons
 - SDF, DDF
- Synovial structures
 - Fetlock, digital sheath



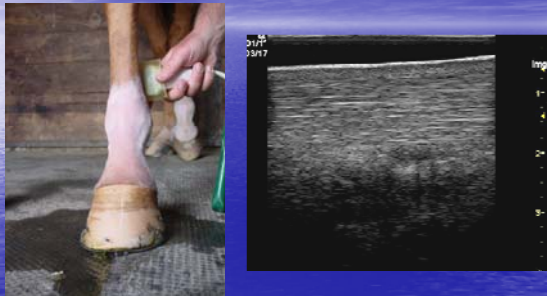
Lateral/Medial Aspect



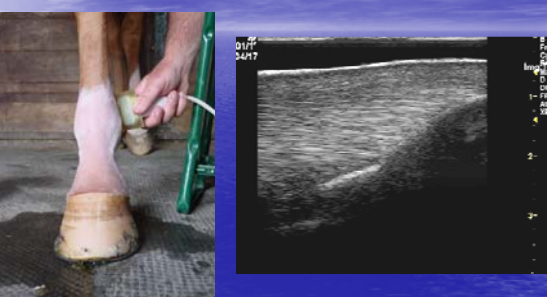
Lateral/Medial Aspect

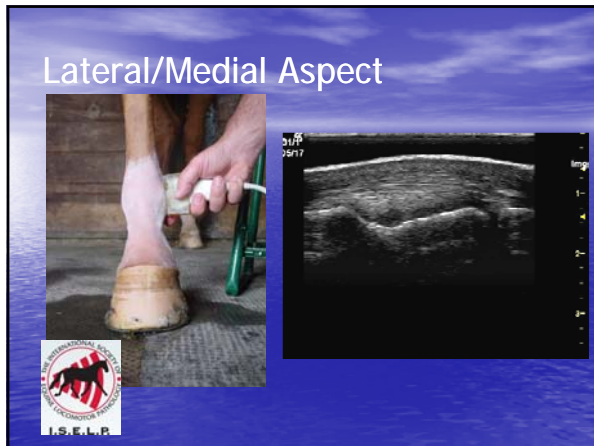


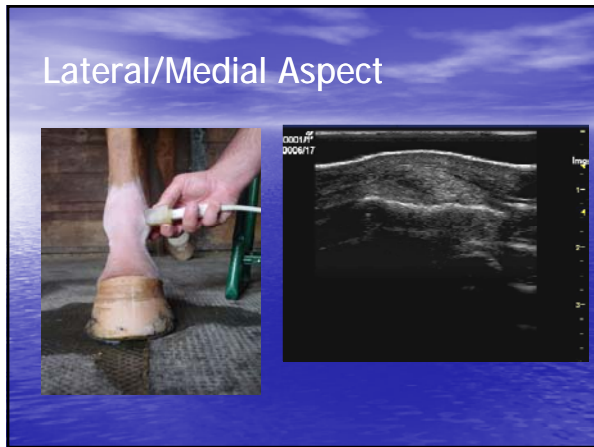
Lateral/Medial Aspect

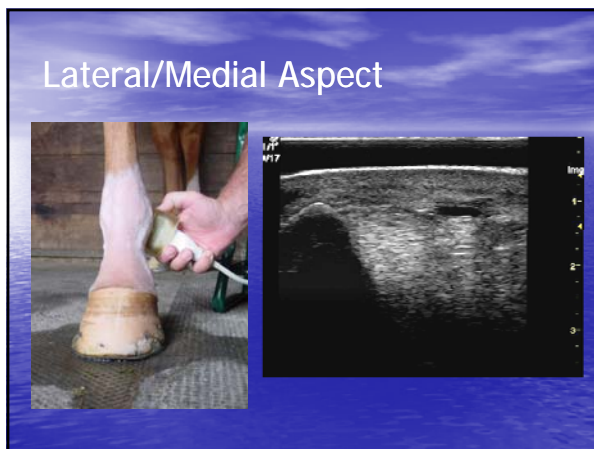


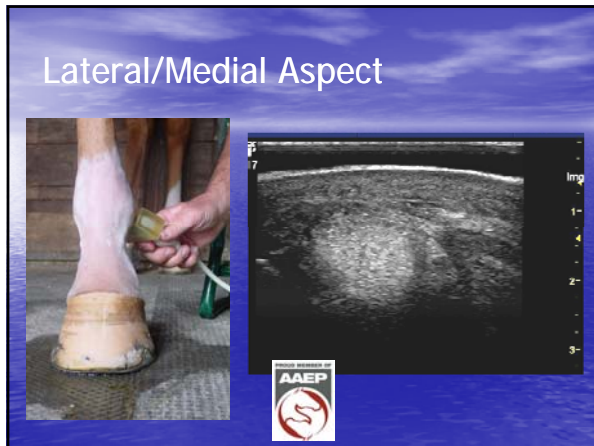
Lateral/Medial Aspect



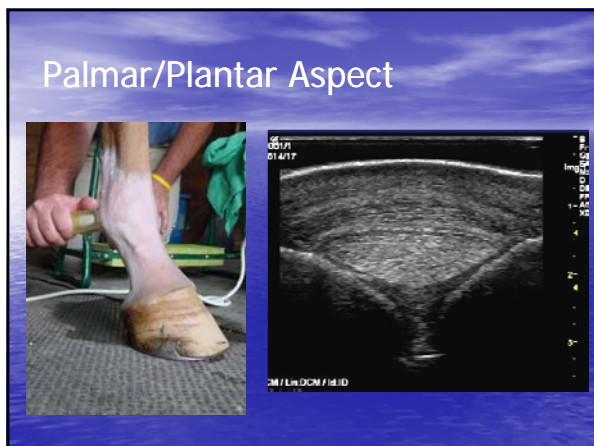
























Jumper, SF, 9 years, Geld

- Showed in class 2 days ago, worked on flat yesterday, lame today
- Sore to palpate DDFT just proximal to fetlock
- Lameness left front (3/5), mod increased tendon sheath and fetlock joint effusion, lower leg flexion test (4/5)



Jumper 5/2012

- Blocked fetlock joint- 90% sound
- Lower leg flexion test- very slight positive



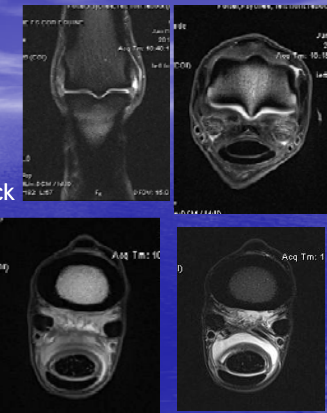
Jumper 5/2012

- Radiographs- NSF
- Ultrasound- lateral DDFT proximal to fetlock edema and fibrillation
- What next?




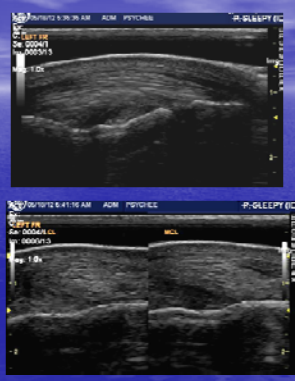
Jumper

- MRI
 - Lateral collateral ligament of fetlock
 - Joint fluid evasculatation
 - DDF tendon fibrillation and tenosynovitis



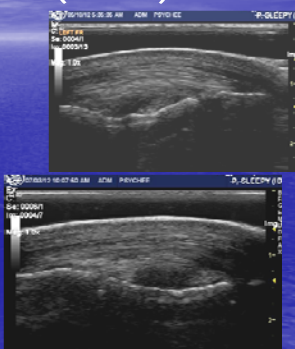
Jumper

- Treatment
 - LCL intralesional injection of PRP
 - Tendon sheath treatment with HA/ Traimcinalone



Jumper 7/2012 (7 wks)

- Hand walk and stall rest
- LITUS locally LCL
- No joint or tendon sheath effusion
- No lameness in straight line
- Lower leg flex- very slight positive



Jumper 9/2012 (15 wks)

- No joint effusion
- No lameness
- Negative flexion test
- Eurociser past 6 wks
- Aquaciser past 3 wks
- Start ride walk in 1 month



Jumper 11/2012

- Working on flat under tack 4 d/wk
- Aquaciser 2-3 d/wk
- Trotting over poles on ground
- Plan- start jumping small Jan 2013




Driving Horse SB, 11yr, Geld

- Hx of 6 wks varied gait right hind
- Treated w/ Chiro and Acupuncture w/ some success
- Worked hard for two days and more uneven gait



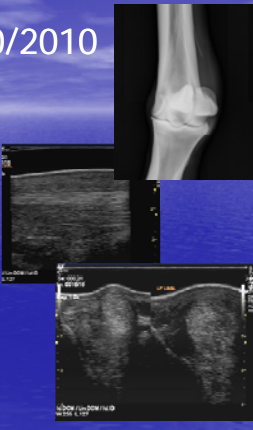
Driving Horse 10/2010

- Lameness LF (2+/5)
- Lateral branch SL warm, swollen, sensitive
- LF lower leg flex-positive (3+/5)
- RH upper leg flex-positive (2/5)



Driving Horse 10/2010

- LF low palmar block- 70% improved
- LF high SL block- sound, RH (2/5)
- Rads- OA fetlock
- US- desmitis of lateral branch SL

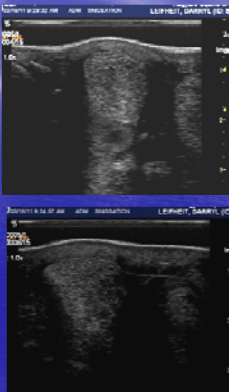


Driving Horse

- Initially treated with poultice bandages, cold hydrotherapy, diclofenac cream, systemic NSAIDs
- 11/2010- BMA/PRP USGI intralesionally into LF lateral BSL, BMA sent for culture
- 12/2010- Cultured stem cells/PRP USGI intralesionally
- Stall rest w/ hand walk for 60 days
- Shockwave- 3x q 2 wks, then 4x q month


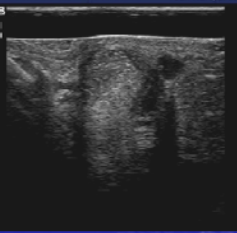
Driving Horse

- 1/2011- no lameness, no soreness to palpate, negative flexion test, no joint effusion
- 3/2011- no lameness, swelling decreased, no soreness to palpate
- Start long line 2 wks, then cart 2 wks, Back on Track bandages



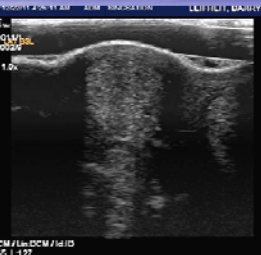
Driving Horse

- Increased workload 3/11-6/11 for dressage and cones competition end of June
- Mid-June- lame LF (2/5) with pain to palpate proximal to previous injury
- LF lower leg flex- positive (2+/5)
- USGI stem cells/PRP 2 days later



Driving Horse

- Treatment- hand walk, shockwave, LITUS tx for 2 months (8/11)
- Increase workload with long line and cart for 4 months (12/11)



Driving Horse 5/2012

- Working regularly 6 d/wk with cart on level, consistent footing, SL shoe
- No lameness, negative flexion
- Mild irregular gait hind- injected hocks



Driving Horse 7/2012

- Recurrent mild desmitis of LF lateral BSL- lame (2/5)
- Treatment- USGI w/ stem cells/PRP
- Consider collagen testing
- Start slow exercise program



Driving Horse 8/2012-present

- Third attempt at rehab program
- Controlled graduated exercise program
- Continued monitoring



Questions?