

Clinical Case

“Klass”

9-year old mare – Hunter/Jumper

Deep Digital Flexor Tendon Lesion

20 FES Treatments on legs

9 FES Treatments on top line

Until sound for jumping competitions

SUMMARY: MRI results indicated lesion of right fore deep digital flexor tendon. Upon initial examination mare was uncomfortable showing Grade 3/5 lameness on right front under saddle. Right scapula was significantly dropped relative to left scapula when standing. L2 – S4 was extremely tender to palpation. Gluteals were also extremely reactive to palpation, especially on right. When riding, mare dropped right shoulder excessively in turns, was stiff to right bend through torso and leaned heavily on right rein.

Shoeing was evaluated and heels of shoes were lengthened for support of fore limbs.

FES treatment began on 6/23/06. Both legs were treated and contractions were not visible during treatments. Edema in right front occurred after 2 FES treatments, perhaps due to running during turnout. Edema resolved 2 days after 2nd FES treatment. Ice packs were used on both legs daily. Mare was turned out daily and hand walked twice a day for a minimum of 1 hour per day for first month. Mare was walked on varied surfaces and up and down small hills. Anterior, posterior and lateral flexion of fetlock for several minutes was done on a daily basis.

At 2 months, mare continued with turn out and hand walking. Longeing was added and included trotting large circles, a minimum of 20 meters in width for a minimum of 20 minutes on each side. Trot quality improved weekly. Riding at walk and some trotting was started. MRI showed improvement in tendon lesion and fluid was no longer present.

At 2.5 months, canter work was added and longe time was increased to 30 minutes each side. Riding at the trot and canter was also incorporated at this point, with longeing used as warm up when necessary for relaxation before riding. Icing of both legs was done after any longeing or riding session.

At 3 months, mare was trotting and cantering easily under saddle and working on suppling exercises. Ice was continued after riding or longeing. At 3.5 months small jumps were added. At 6 months course work at 2-3 foot was added. At 9 months mare was back to full competition schedule.

5/1106 MRI Results

- Right fore, Deep Digital Flexor Tendon
 - Focal Core Lesion of medial lobe
 - Degenerative Change
- Right fore, Lateral Collateral Ligament of the DIP Joint
 - Focal Degenerative Change
- Right fore, Navicular Bursa
 - Current or Previous Bursitis
- Right fore, Third Phalanx
 - Focal Defect
 - Inflammation, Stress Related Edema or Contusion
- Right fore, Navicular Bone
 - Inflammation, Stress Related Edema or Contusion
- Right and Left fore, Navicular Bone
 - Enlarged Synovial Invaginations

May 11, 2006
RF/LF foot



T1W 3D Transverse, RF
Arrow indicates increased signal at the dorsal margin of the deep digital flexor tendon lesion. This is the lesion of the deep digital flexor tendon.



STIR FSE Sagittal, RF
The red arrow indicates increased fluid in the navicular bone. Yellow arrow indicates abnormal fluid accumulation of the coffin bone. This represents edema/contusion, secondary to abnormal gait due to pain stemming from the deep digital flexor tendon.

- 6/23 FES treatment
Right front
Left front
Movement Evaluation
Grade 3 lameness right fore
Right shoulder “dropped”
- 6/24 FES treatment
Right front
Left front
- 6/26 FES treatment
Right front
Left front
- 7/21 FES treatment
Right front
Left front
- 7/22 FES treatment
L2 – S4 (loins to mid gluteals)
Right front
Left front
- 7/23 FES treatment
T13 – L4 (behind withers)
Right front
Left front
Movement Evaluation
Longeing sound both directions, trot
- 7/24 FES treatment
T13 – L4 (behind withers)
Right front
Left front
- 8/25 FES treatment
T15 – S1 (mid back to loins)
Right front
Left front

8/26 FES treatment
T13 – L4 (behind withers)
Right front
Left front
Movement Evaluation
Longeing sound both directions trot and canter
Riding sound at trot and canter

8/27 FES treatment
Right front
Left front

8/28 FES treatment
Right front
Left front

8/31 **MRI RESULTS**

“The tendon lesion has improved on T2-weighted and STIR images and does not contain fluid”, “the tendon lesion does not appear active”

AUGUST 31, 2006
RF foot



T2W FSE Transverse

Arrow indicates increased signal at the dorsal margin of the deep digital flexor tendon lesion. This is the lesion of the deep digital flexor tendon with tissue proliferation/adhesions formed between the DDFT, navicular bursa, and collateral sesamoidean ligament.



STIR FSE Sagittal

The red arrow indicates a focal region of increased fluid in the navicular bone (edema of the medullary cavity has resolved). The edema of the coffin bone has resolved. Yellow arrow indicates improvement of the amount of fluid present in the navicular bursa (improved bursitis).

- 9/28 FES treatment
Right front
Left front
- 9/29 FES treatment
Right front
Left front
- 10/1 FES treatment
Right front
Left front
- 10/3 FES treatment
Right front
Left front
Movement Evaluation
Sound trot and canter, some small jumps
- 12/10 FES treatment
L2 - S3 (mid back to anterior gluteals)
Right front
Left front
- 12/11 FES treatment
T13 – L4 (behind withers)
Right front
Left front
- 12/12 FES treatment
Right front
Left front
Movement Evaluation
Jumping courses 2' 6"
- 1/20 FES treatment - normal tendon contractions
Right front
Left front
- 3/20 FES treatment
Right front
Left front

3/21 FES treatment
T13 – L4 (behind withers)

3/22 FES treatment
T13 – L4 (behind withers)
Movement Evaluation
Returning back to full work and competition schedule