



Peninsula Equine - Menlo Park & Gilroy Gaits, CA  
Russ Peterson, DVM, MS, DACVSMR, cert. ISELP  
19 Year-Old Gelding Warmblood Jumper

## Pre-Tx

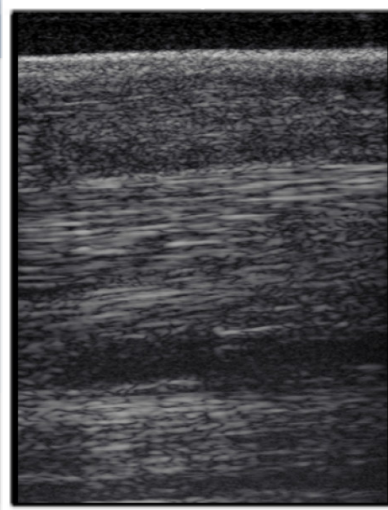
Injury/Dx SDFT injury

Injury Date 6/27/15

Chronicity Acute

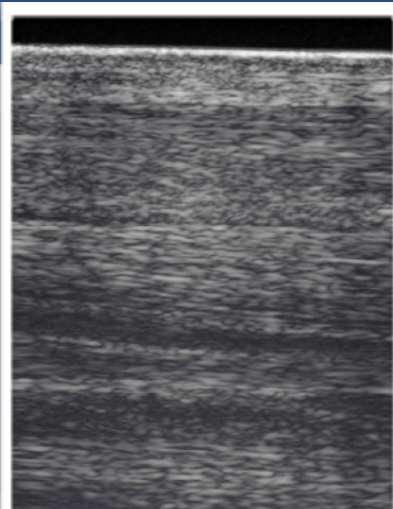
Lameness  
Grade 3

Pre Tx  
Notes Acute, traumatic rupture of the SDFT during World Cup jumping event.  
Marked fiber disruption and enlargement, medial greater than lateral, SDFT  
from 6-24 cm DACB.



## Post-Tx

### Farther Down



# Tx's 31

Other  
Therapies Used Ice/Game Ready

Post RLT Notes Returned to rehab in December (approximately 5 months post injury). He was sound at the trot  
straightline and lunge, and planned 4 month rehab and exercise program. Progress report 5/16,  
he was doing walk/trot/canter lessons without lameness.



Peninsula Equine - Menlo Park & Gilroy Gaits, CA  
Russ Peterson, DVM, MS, DACVSMR, cert. ISELP  
21 Year-Old Female Quarterhorse Amateur Hunter Jumper

## Pre-Tx

Injury/Dx SDFT rupture

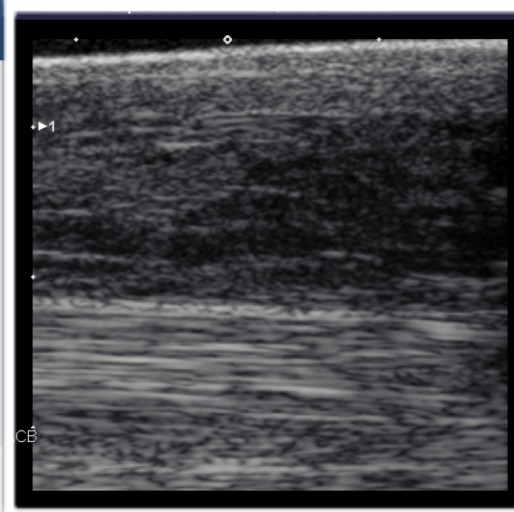
Injury Date 11/26/13

Chronicity Acute

Lameness  
Grade 4

Pre Tx  
Notes

Injury occurred in turnout. 50% CSA rupture of SDFT extending from mid-metacarpus proximally into carpal canal. Medial lobe most affected especially 1-12 cm DACB.



## Post-Tx

# Tx's 39

Other  
Therapies Used Ice/Game Ready

Post RLT Notes

8 months post RLT therapy, she began under saddle walk rehab program. In 12/14 (13 months post injury) W/T began and in 5/15, she was returned to training without lameness and has remained sound as a lesson horse, jumping up to 2'6 regularly.





Peninsula Equine - Menlo Park & Gilroy Gaits, CA  
Russ Peterson, DVM, MS, DACVSMR, cert. ISELP  
4 Year-Old Female Quarterhorse Reiner

## Pre-Tx

Injury/Dx SDFT Injury

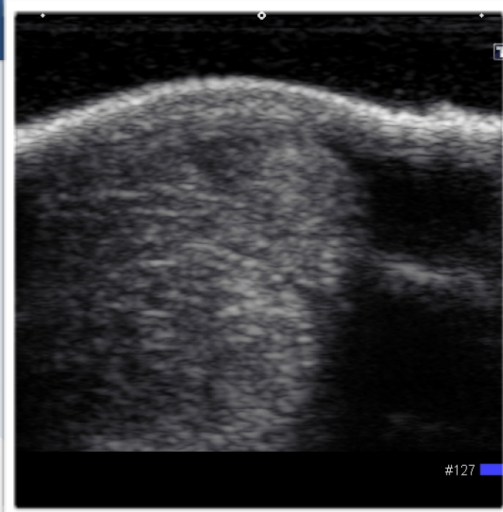
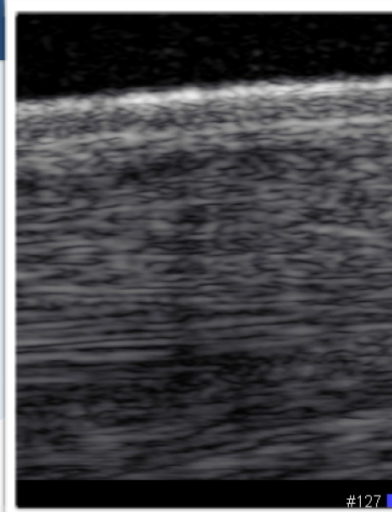
Injury Date 3/12/14

Chronicity Acute on Chronic

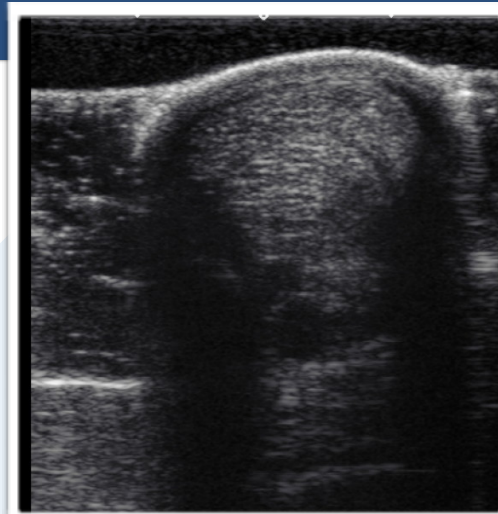
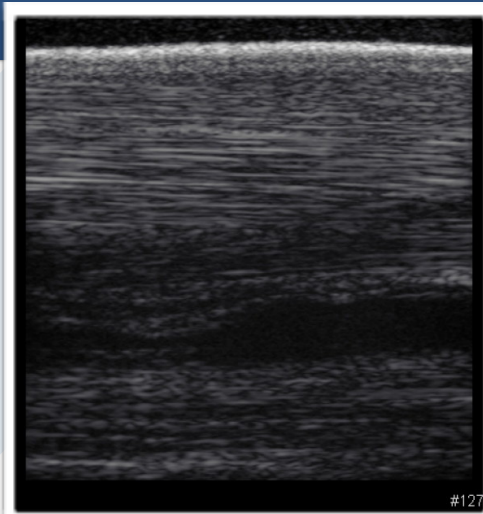
Lameness  
Grade 2

Pre Tx  
Notes

She sustained a contusion to her SDFT in a reining competition. The lesion did not respond to treatment and lameness persisted, whereupon she initiated RLT therapy on 4/21/14.



## Post-Tx



# Tx's 38

Other  
Therapies Used Ice/Game Ready

Post RLT Notes

In June 2014, she returned to light training without lameness and subsequently returned to successful training and performance/competition





Peninsula Equine - Menlo Park & Gilroy Gaits, CA  
Russ Peterson, DVM, MS, DACVSMR, cert. ISELP  
7 Year-Old Female Warmblood Upper Level 3-day Eventer

## Pre-Tx

### Injury/Dx

SDFT  
Contusion &  
Strain

### Injury Date

10/7/16

### Chronicity

Acute

### Lameness Grade

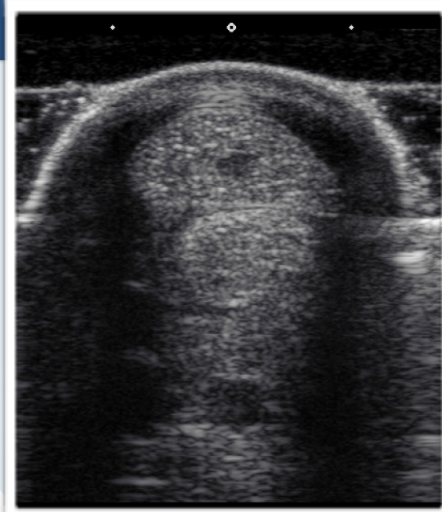
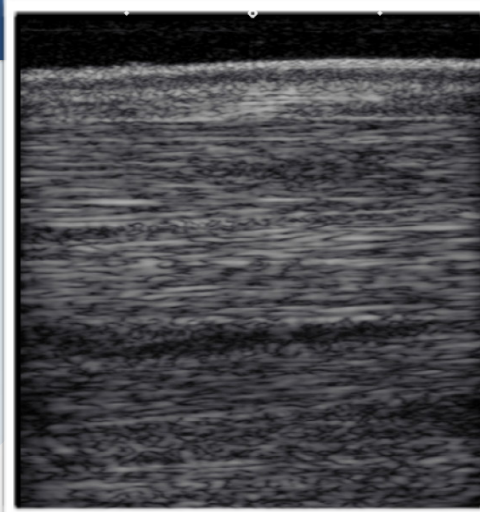
1

### Pre Tx Notes

She sustained a SDFT contusion during cross country phase of a CSI\*\* 3-day event. She was not lame acutely but exhibited pain on palpation and swelling. RLT therapy initiated 11/16/16.

### Previous Tx Failed

Systemic NSAIDs and steroids and ice therapy aided to decrease therapy but 1/5 lameness still present at 30 days post injury



## Post-Tx

### # Tx's

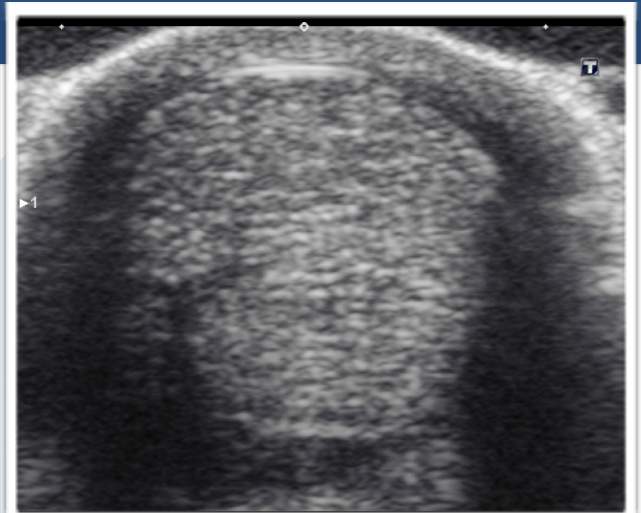
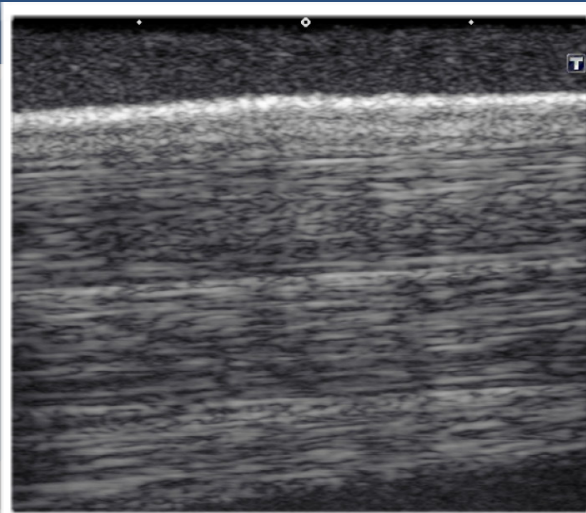
32

### Other Therapies Used

Ice/Game Ready

### Post RLT Notes

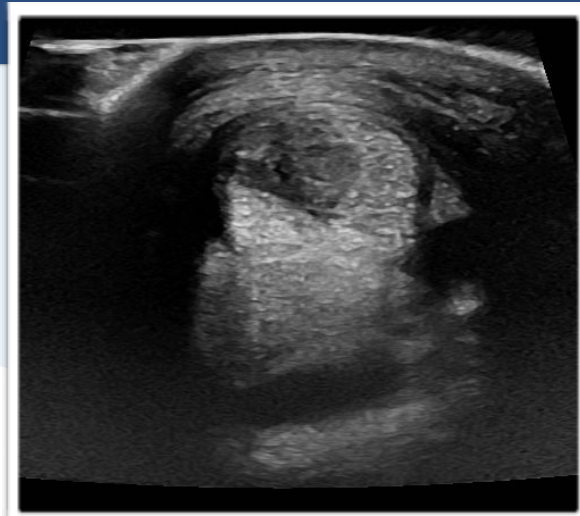
Returned to farm to begin 60 days of rehab program of aqua-therapy and Eurowalker. She was sound and returned to training 4/14/17 and is currently competing without lameness.



North Bridge Equine - Concord, MA  
 Fred Nostrant, DVM  
 18 Year-Old Gelding Dutch Warmblood Dressage Grand Prix

SOUND®  
**SMART RLT**  
 Regenerative Laser with an IQ 

## Pre-Tx



### Injury/Dx

Left-Front  
 Superficial Flexor  
 Tendonitis

### Injury Date

9/28/16

### Chronicity

Acute

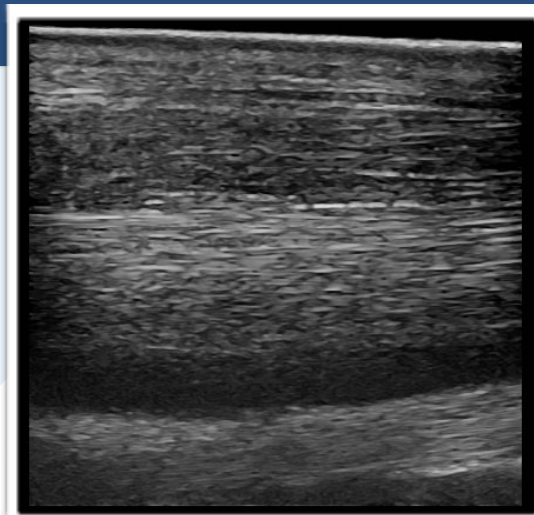
### Lameness Grade

4

### Pre Tx Notes

Horse presented lame left front at the walk (4/5 AAEP scale) with marked enlargement of the tendons of left front from carpus to distal 1/3 of cannon bone. Marked pain on palpation and moderate heat in tendons. Ultrasound reveals acute tendonitis of SDFT from zone IA-IIIa.

## Post-Tx



### # Tx's

16

### Other Therapies Used

Ice/Game Ready

### Post RLT Notes

Horse responded very well with reduction of lameness and marked reduction in edema and heat within 2 treatments (acute setting). Continued treatment at chronic setting twice a week for 16 treatments (treatment still in progress). Second ultrasound is at 4 weeks post injury after 8 RLT treatments.

Essex Equine, Inc. - Bolton, MA  
Brett Gaby, DVM  
15 Year-Old KWPN Female Amateur Owner Jumper

## Pre-Tx

### Injury/Dx

SDFT Tear  
@ Myotendinous  
Junction

### Injury Date

9/11/16

### Chronicity

Acute

### Lameness Grade

4

### Pre Tx Notes

She sustained a SDFT contusion during cross country phase of a CSI\*\* 3-day event. She was not lame acutely but exhibited pain on palpation and swelling. RLT therapy initiated 11/16/16.

### Previous Tx Failed

PRP (3-site injection), Shockwave, Banamine, Traumeel gel



## Post-Tx

### Other Therapies Used

Ice/Robert Jones Wrap

### Post RLT Notes

Due to the severity of the SDFT tear, an additional therapy as instituted, the RLT laser was started on January 5, 2017. On February 16, 2017, an ultrasound was performed. Comparative imaging showed a clear and distinct improvement in fiber alignment, density and organization,

compared to previous images. Based on the significant clinical response, the owner elected to continue the laser treatment which recommenced on February 21, 2017. On March 27, 2017 ultrasound follow up was performed on the LF SDFT. Most notable is the reduction in SDFT circumference section 2B to 3B. The proximal tendinous area is similar. Observation of the horse on July 27 2017 demonstrated a LF + to 1 asymmetry with a concurrent LH 1+ to 2 of 5 (owner reported chronic LH issue) at the trot, with no worsening or aggravation following the canter.





Essex Equine, Inc. - Bolton, MA  
Brett Gaby, DVM  
15 Year-Old KWPN Female Amateur Owner Jumper



Lena (Valencia), a 15-year-old KWPN female was seen on September 11, 2016 for an active onset of left front lameness. The horse had been schooling when lameness was observed. Prior to the injury the horse has been actively showing in amateur owner jumper divisions.

Upon presentation, the LF lameness was graded 4 of 5 (AAEP scale 0-5). The LF superficial digital flexor tendon (SDFT) was palpated and found to have a soft/fluid consistency. These findings are pathopneumonic for an acute SDFT tear typically originating at the myotendinous junction. The horse was sedated with .3cc Dormosedan and administered 10cc Banamine, both given intravenously. Ultrasound images were performed (GE Logic) sections carpal canal and 1A-3C. Due to the severity of damage the horse was placed in a Robert Jones wrap with a cut PVC pipe extending from the dorsal cannon to the distal phalanx/hoof and secured with duct tape. The wrap was to remain in place for up to 72 hours, and reset at that time. Exceptions included slippage or breakage of PVC pipe. Pain management relied on a 250mg Banamine powder give per OS BID. Topical Traumeel gel was applied with Surpass cream at the time of bandage change.

Follow up ultrasound was made on October 13, 2016. On October 27, 2016 Platelet Rich Plasma (PRP) 8cc concentrated from 1 52ml blood draw (Magellan system) was injected into the SDFT at 3 sites, section 1A, 2A, 3B. Following PRP injection the LF tendon was shockwaved (Versatron) R20 E6 1000 pulses. Successive shockwaves were performed with the same probe and energy setting (November 3, 2016, November 11, 2016).

November 23, 2016 the LF SDFT was re-ultrasounded. Most notable findings included the movement of the SDFT from a medial to axial position. The SDFT fibers in section 1A showed greater uniformity with an overall reduction in SDFT circumference. Distally, section 2B to 3B the SDFT was enlarged with anechoic fissuration and lacunae. Margins of the SDFT lacked distinction/crispness. The horse was still walking lame (grade 3+). The horse was to remain in a Robert Jones bandage without the splint. The horse was still on Banamine 250mg PO BID.

**Due to the severity of the SDFT tear, an additional therapy as instituted, the RLT laser was started on January 5, 2017.** The horse was iced 10-15 minutes prior to each treatment performed. Technicians from the practice (Essex Equine, Bolton MA) treated the horse every other day for the month of January. A Robert Jones wrap was applied after each treatment. Technicians (3 separate) noted marked improvement in the comfort level by the end of the month. (Video recorded January 31, 2017).

On February 16, 2017, an ultrasound was performed. **Comparative imaging showed a clear and distinct improvement in fiber alignment, density and organization.** These findings were compared to previous images. **Based on the significant clinical response, the owner elected to continue the laser treatment which recommenced on February 21, 2017.** Laser therapy was continued every other day until March 21, 2017. A similar protocol was followed to that executed in January. The horse was hand walked for 15-20 minutes twice/day with stall rest.

On March 27, 2017 ultrasound follow up was performed on the LF SDFT. **Most notable is the reduction in SDFT circumference section 2B to 3B.** The proximal tendinous area is similar. The horse was instructed to walk under saddle (15-20 minutes) and was placed in polo wraps by day and standing wraps by night.

A soundness examination was performed on May 11, 2017. The horse was walking well under saddle. Small trot bursts involving  $\frac{3}{4}$  around the ring were performed. The LF was graded 1+ to 2 at the start of the ride. LF soundness improved to grade 1 at the end of the ride. The owner/rider was instructed to increase trotting by  $\frac{1}{4}$  of the ring each week, icing the SDFT following trotting and warming of the tendon prior to riding. Additionally, the owner was instructed to monitor for any profile changes to the SDFT.

Continuous trot work up to 15 minutes was made. **Observation of the horse on July 27 2017 demonstrated a LF + to 1 asymmetry with a concurrent LH 1+ to 2 of 5 (owner reported chronic LH issue) at the trot, with no worsening or aggravation following the canter.**

The horse's hocks were recently injected on July 31, 2017. The owner, a veterinary student, is pleased with results. Video of horse recorded September 5, 2017.

**Essex Equine, Inc. - Bolton, MA**  
**Brett Gaby, DVM**  
**16 Year-Old Oldenburg Gelding 3' Hunter**



Clueseau, a 16-year-old Oldenburg gelding, was examined on May 3, 2017 for not feeling right. The horse has wintered in Ocala Florida and was actively shoeing in 3' Hunter division classes. Two months prior to presentation, front fetlocks and coffin joints were injected. Upon presentation, the horse was wearing plain steel shoes, and the hooves were negative to hoof testers. There was minimal amount of thickening in the plantar metacarpal area which was not significantly reactive to palpation. The horse was lunged on firm ground, a light left front asymmetry grade 0.5 of 5 (AAEP scale 0-5) was noted. Flexion tests of the LF initially involved a full limb grade 1+, heel compression 1 to 1+, and a suspensory compression test 0.

The horse was then observed under saddle, which significantly exacerbated the LF lameness 1 to 1+ to the left and 2 to 2+ to the right at the trot. Carpal flexion of the LF with the rider was 3+ to 4 of 5. Diagnostic nerve blocking of the distal limb was performed to rule out other mitigating factors. No observable change in soundness was observed with distal limb diagnostic analgesia. A proximal ulnar nerve block was performed on the LF limb improving soundness to greater than 90%.

Ultrasonographic imaging (Logic E) was performed of the LF proximal metacarpus and compared to that of the contra lateral limb. The superficial digital flexor tendon is diffusely enlarged compared to the contra lateral limb. The fibers within the SDFT are separated by anechoic foci and fissures. Fibers of the SDFT are loosely organized and have a mixed fiber type. Additionally, marked peritendinous fibrosis surrounding the superficial palmar carpal ligament is present. Given these findings, the horse was placed on small paddock turnout with support wrapping by day and night. Surpass (Diclofenate) cream was applied to the LF palmar metacarpal region.

The horse was re-examined on May 31, 2017. The ultrasound remained unchanged. Carpal flexion in hand was grade 3 of 5. Regenerative laser therapy (RLT laser, Sound) was initiated on June 2, 2017. A standard protocol of tendon icing 10-15 minutes followed by laser treatment every other day was performed by technicians at Essex Equine (Bolton, MA). The horse was placed in a hospital pen turnout (20' x 20') and was support wrapped 24/7.

Follow up ultrasound was performed on July 3, 2017, demonstrating a slight reduction in SDFT size. Margins of the SDFT were more defined/crisp. Fissurations with anechoic lacunae were reduced but still evident. The superficial palmar carpal fascia remained thickened. The horse was flexed to the carpus (flexion causing most aggravation of proximal SDFT injuries), resulting in a grade 2 to 2+ of 5 response.

RLT therapy was initiated for a second month. The LF SDFT was re-ultrasounded August 3, 2017. Images demonstrate a modest reduction in SDFT circumference. Moderate reduction in superficial palmar carpal fascia thickening and a slight improvement in fissuration.

The horse remained on small paddock turnout, and taken out of support wraps. The RLT laser treatment was initiated for a third month (slight change in protocol).

The horse was flexed for soundness on September 3<sup>rd</sup>, 2017 and was non-reactive grade 0 of 5.

Follow up ultrasound on September 4, 2017 demonstrated further circumferential remodeling of the SDFT within and extending just distal to the carpal canal. Further fiber remodeling in this area is evident, replacing smaller fibers with those of medium size. The SDFT at section 1A to 1B appears similar to last imaging. There is a mottled area with pinpoint anechoic foci.

The horse is currently walking under saddle 10-15 minutes for 2 weeks. This will be followed by 5 minutes of trotting with a 5 minutes increase in trot work each week. Based on how the horse is doing cantering of 5 minutes each week followed by 5 minutes increases will follow.





Pferdeklinik Bargteheide - Bargteheide, Germany  
Drs. Jahn/Sill/Lorenz/Brunk  
6 Year-Old Gedling Hannoveraner Dressage

Injury/Dx

SDFT  
Lateral Border

Injury Date

9/7/13

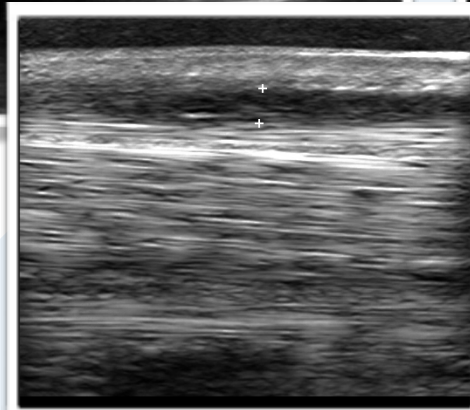
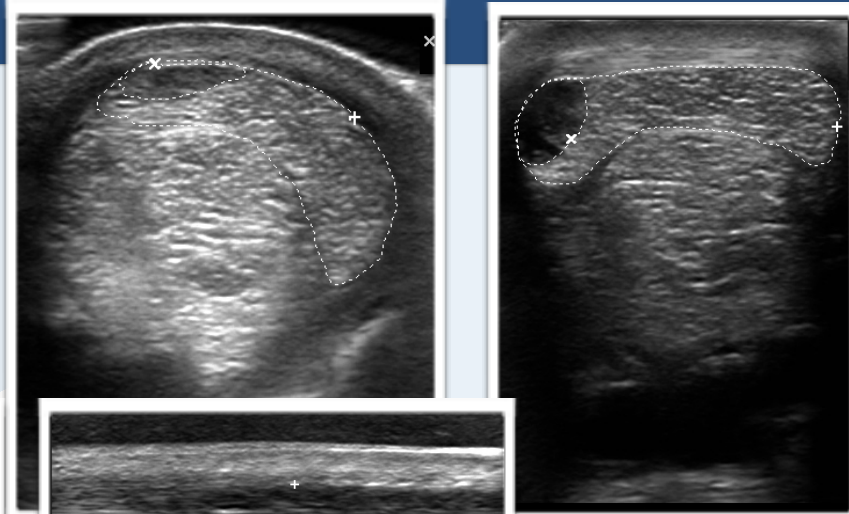
Chronicity

Acute

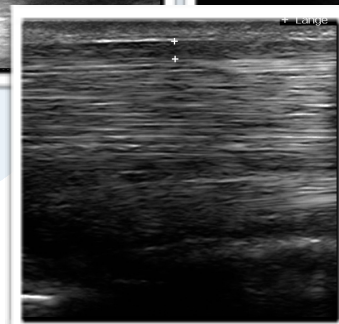
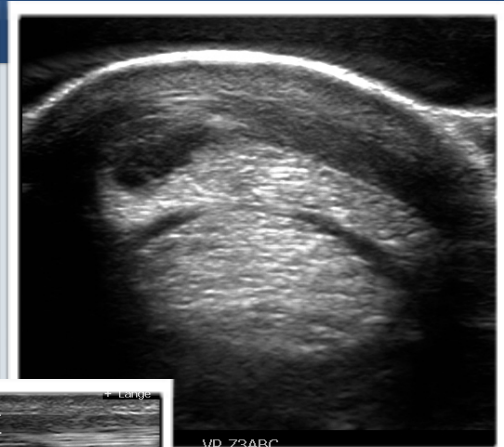
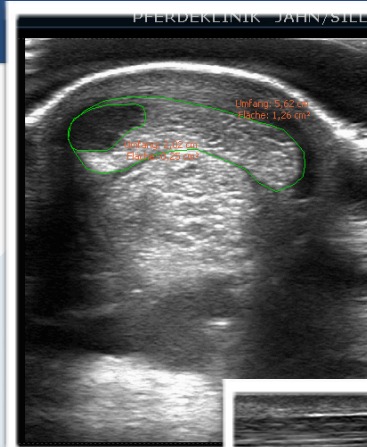
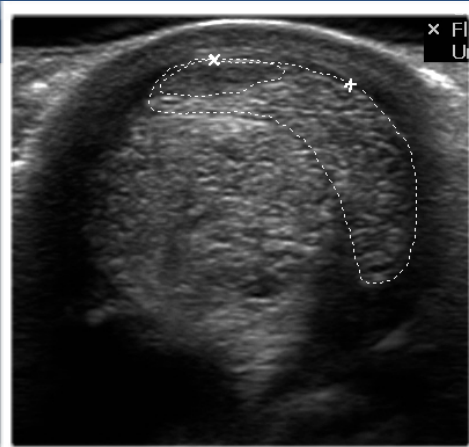
Lameness  
Grade

2

**Pre-Tx**



**Post-Tx**





Equine Medical Associates - Lexington, KY  
James Morehead, DVM & Peggy S. Marsh, DVM, DACVIM, DACVECC  
3 Year-Old Colt Thoroughbred Racehorse



## Pre-Tx

### Injury/Dx

Apical Fracture  
Medial Sesamoid  
Subsq. Suspensory  
Branch Desmitis  
at Fragment Removal

### Injury Date

11/1/12

### Chronicity

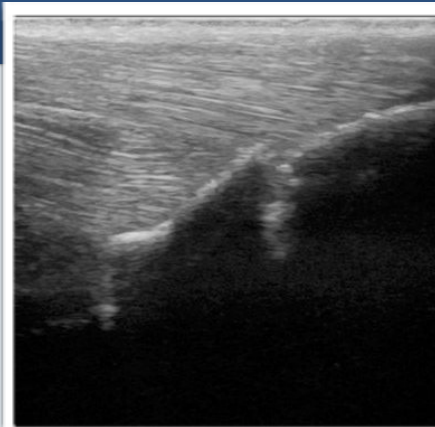
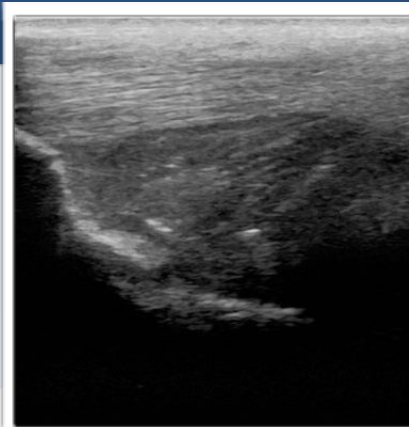
Chronic

### Lameness Grade

1

### Pre Tx Notes

As a 3 year old, late in the season, this colt was racing well, winning graded stake races. He was injured Nov 2012 and surgery was performed to remove an apical fragment from the medial sesamoid of the left front. There was associated tearing of the medical branch of the sesamoid at the site of fragment removal. Approximately 1 month post surgery IRAP was administered and then about 60 days later a series of laser treatments were initiated.



## Post-Tx

### # Tx's

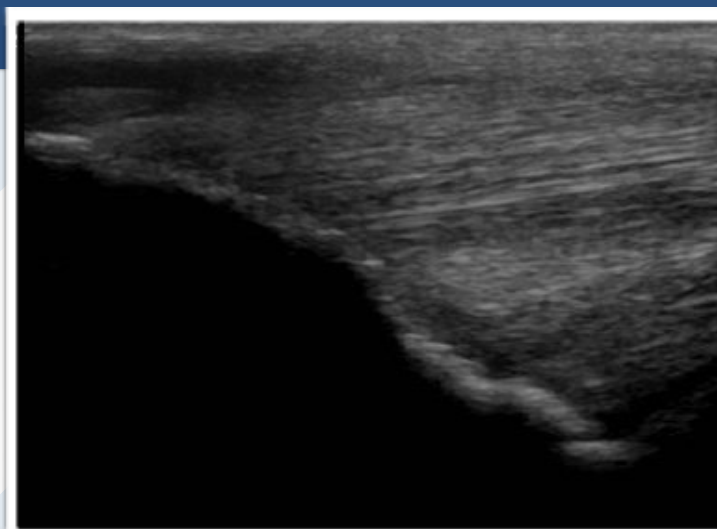
23

### Other Therapies Used

IRAP

### Post RLT Notes

After a period of rehabilitation the horse returned to racing in Oct 2013. Since that time the horse has continued to race with total earnings now over a million and a win in a grade 3 stakes race in 2015.





Equine Medical Associates - Lexington, KY  
James Morehead, DVM & Peggy S. Marsh, DVM, DACVIM, DACVECC  
11 Year-Old Gelding 1/2 Arabian Show Horse (English Pleasure)

## Pre-Tx

Injury/Dx Left-Front  
Suspensory  
Desmitis

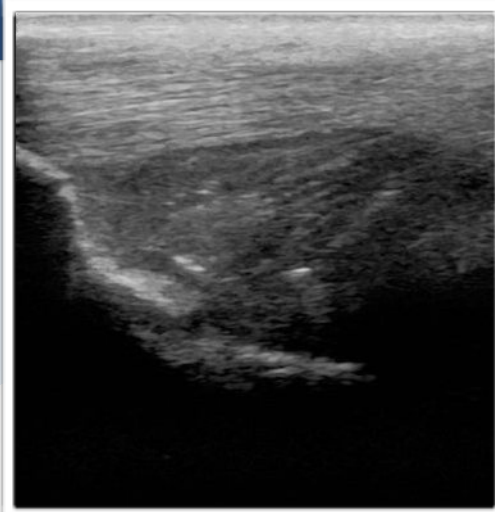
Injury Date 9/1/13

Chronicity Chronic

Lameness  
Grade 1

Pre Tx  
Notes

Horse was referred from out of state by Dr Rantanen for a series of RLT laser treatments for a chronic injury of the left front suspensory ligament. Prior to injury the horse had been competing and winning at the US National 1/2 arab championships in English pleasure. Initial ultrasound showed a central lesions in the distal body of the suspensory ligament, as well as evidence of desmitis of the medical branch.



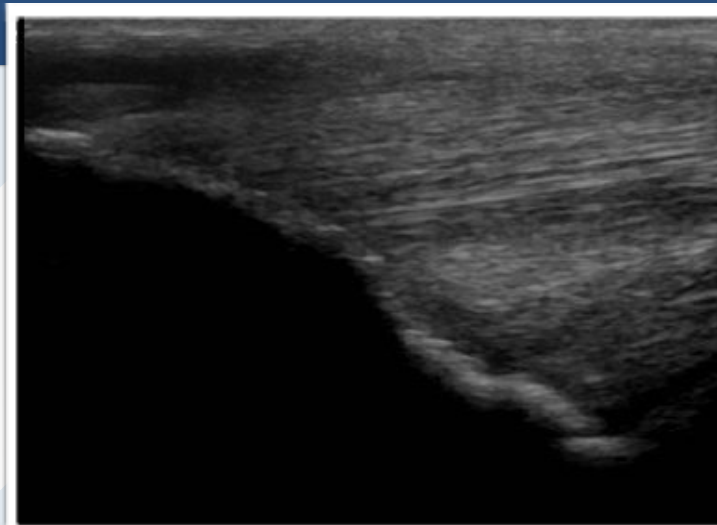
## Post-Tx

# Tx's 35

Other  
Therapies Used None

Post RLT Notes

Was referred to our location from out of state and after left our care, images below are about 2 months after finishing a series of laser treatments in the spring of 2014. Reports from owner is that horse returned to active training and this past year (2015) was named US National champion in 1/2 arab English pleasure driving.







Equine Medical Associates - Lexington, KY  
James Morehead, DVM & Peggy S. Marsh, DVM, DACVIM, DACVECC  
1 Year-Old Gelding Thoroughbred Racing Prospect



Injury/Dx

Left-Hind  
Lateral Suspensory  
Branch Desmitis

Injury Date

12/1/14

Chronicity

Chronic

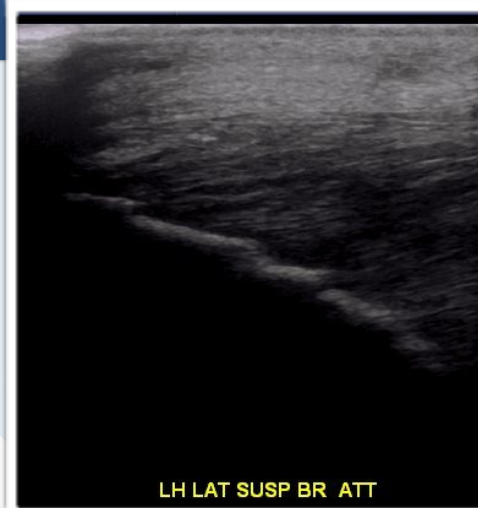
Lameness  
Grade

0

Pre Tx Notes

First noted as swelling over the lateral sesamoid Dec 2014, the limited training was stopped and the horse was turned out; April 2015 first ultrasound revealed lateral suspensory branch demitis - controlled exercise and limited turnout was recommended; serial ultrasound

examinations in June and July revealed no real trend except ongoing evidence of enlarged branch with fiber changes noted at the attachment, there was a trend towards enlargement when allowed more turnout time.



Pre-Tx

Post-Tx

# Tx's

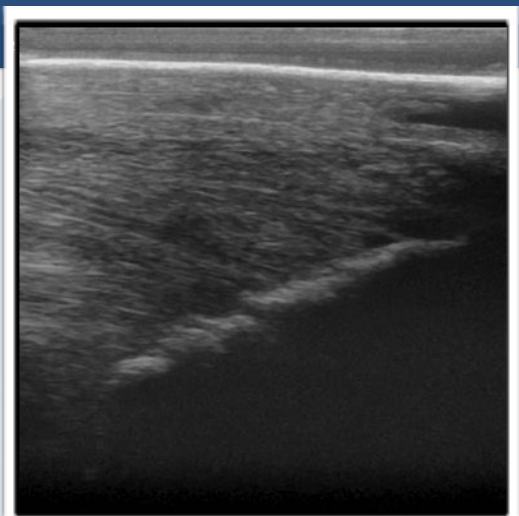
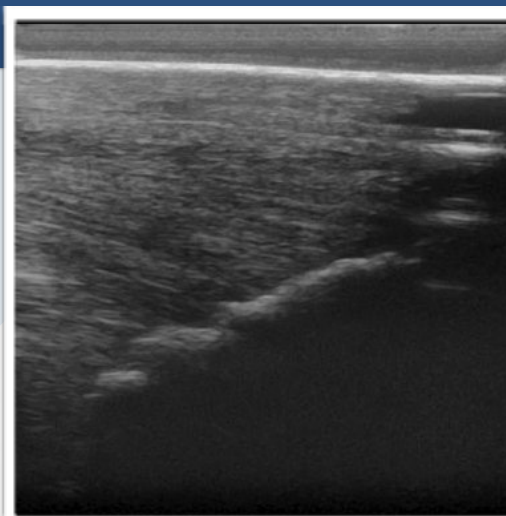
24

Other  
Therapies Used

None

Post RLT Notes

Although improvement was noted over time with the size of the branch, the fiber pattern at the attachment showed a tendency to become more irregular with any increase in exercise or turnout time. Current plan is to turnout long term.



Chicago Equine Medical Center - Wauconda, IL (formerly Merritt & Assoc.)  
Keith Merritt, DVM  
2 Year-Old Thoroughbred Mare Racehorse

## Pre-Tx



Injury/Dx Right-Hind  
DDFT  
Rupture

Injury Date 12/8/14

Chronicity Acute on Chronic

Lameness  
Grade 5

Pre Tx Notes Non weight bearing lame. Only treated with RLT. He had an MRI at another hospital. They recommended euthanasia. Had PRP and Stem cell 60 days prior to start of RLT.

## Post-Tx

# Tx's 35

Other  
Therapies Used Shockwave 1 week prior

Post RLT Notes He was given 1 year of stall rest and hand walking then 2 month of tack walking now he is doing straight line trotting and is sound.

Fairfield Equine - Newtown, CT  
Rick Mitchell, DVM, MRCVS, DACVSMR  
14 Year-Old Mare Warmblood Hunter

SOUND®  
**SMARTRLT**  
Regenerative Laser with an IQ 

Injury/Dx

Inferior Check  
Ligament Lesion

Injury Date

8/18/16

Chronicity

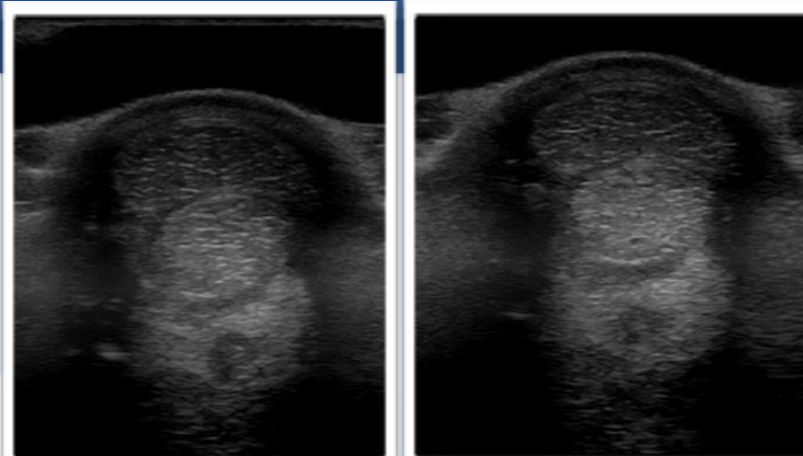
Chronic

Lameness  
Grade

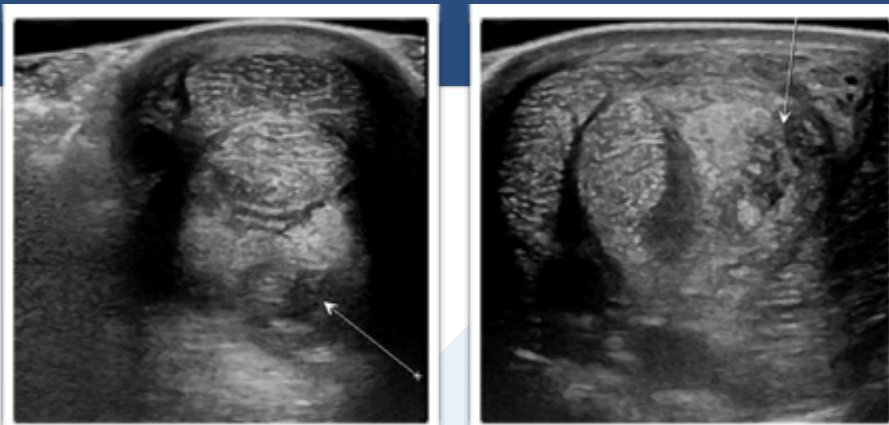
1

Pre Tx  
Notes

BID icing. Cold poultice application nightly for 5 nights. Flunixin meglumine 250mg orally BID for 3 days. Initiated ESWT therapy for 3 treatments 10-14 day intervals. Tack walking exercise only. Lesion has expanded and ICL was enlarged; recommended initiation of SmartRLT.



*Pre-Tx*



*@ 24 Days*

*Post-Tx*

# Tx's  
Other  
Therapies Used

24

None

Post RLT Notes

Profound improvement in 5 weeks of SmartRLT. Horse resumed walk/trot exercise and has continued to progress satisfactorily with no further edema or lameness.

