

Case 030104-01: 7 Year Old Dutch Warmblood Show Jumper Acute Tendonitis

On February 19, 2004, a 7 year-old, Dutch Warmblood show jumper presented with acute right forelimb lameness after a performance. Lameness and ultrasonographic evaluation revealed a lesion in the right front superficial digital flexor tendon extending from zone 2A to 3A with the maximal injury zone (MIZ) being located at zone 2B. The total cross-sectional area at the MIZ was 1.44 cm² and the core lesion area was .46 cm², or 31.9% of the tendon cross-sectional area. Based on ultrasonographic appearance, a diagnosis of acute tendonitis of the superficial digital flexor tendon was made (Figs 1, 1a). The 32% core lesion led to a guarded prognosis for return to full performance, and estimated rehabilitation time was 9-12 months.



**Figure 1: SDFT
February 19, 2004**



**Figure 1a: SDFT, Longitudinal View
February 19 2004**

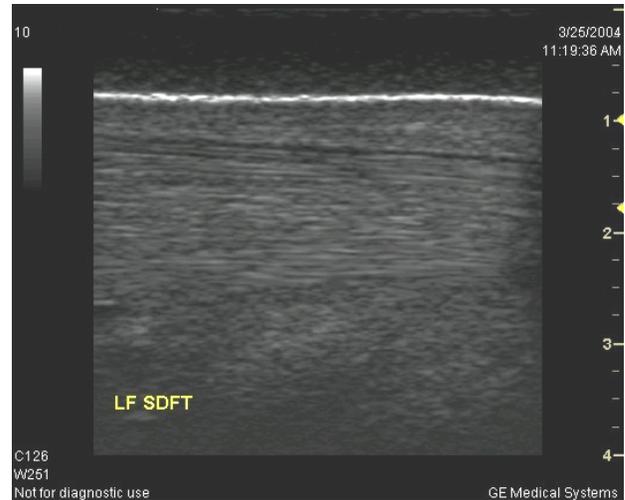
After review of the case and desire for return to full work by the owner, a decision was made to use regenerative cell therapy to reduce the risk of scarring and optimize the strength of the tendon. A 20.75 gram sample of subcutaneous fat was removed from the area lateral to the tailhead and submitted to Vet-Stem, Inc. for stem and regenerative cell recovery. Upon receipt of the therapeutic dose containing 5.6 million regenerative cells, the attending clinician injected the SDF lesion using ultrasound guidance. A total volume of 2.4 mL was administered, split into four sites. Following the injections, a rehabilitation program was instituted with 5 minutes twice daily hand walking the first month with a progressive program of exercise and monthly ultrasound evaluations.

At one month post therapy, the ultrasonographic appearance was substantially improved with filling of the defect and normalization of the fiber pattern (Fig 2, 2a). The total cross-sectional area was reduced to 1.26 cm² and by 90 days had returned to normal at .91 cm². The horse continued to improve and by month 4 was returned to work under saddle. At month 6 the horse returned to full work schedule and subsequently returned to show jumping performance.

Five Weeks Post Treatment



**Figure 2: SDFT
March 25, 2004**



**Figure 2a: SDFT, Longitudinal View
March 25, 2004**