

Case 010406-01: 12 year Old Dutch Warmblood Desmitis of the Suspensory Ligament

On December 31, 2005, a twelve-year-old Dutch Warmblood mare was presented for evaluation of a grade 3/5 lameness in the right rear leg. The patient had become lame during a training session three days prior to evaluation. Ultrasound evaluation of the right rear leg revealed the following findings: a hypoechoic area and an enlargement in the suspensory ligament (level 1B), and on longitudinal evaluation, a linear hypoechoic enlargement region was found within the suspensory ligament. (Fig 1)

Based on the ultrasound appearance, a diagnosis of desmitis of the proximal suspensory ligament and of the lateral suspensory branch (ultrasound not pictured) was made and prognosis for return to prior level of competition was fair.



Figure 1: December 29, 2005

On January 3, 2006, 31.6 grams of subcutaneous adipose tissue was harvested from the coccygeal region, dorso-lateral to the tail head, and submitted for regenerative cell recovery. On January 5, 2006, 6.3 million viable cells were delivered to the damaged areas of the ligament by ultrasound guided injection.

Following a rehabilitation course (rest with light hand walking twice a day), phenylbutazone at 1 gram twice a day for one week post-injection was prescribed.

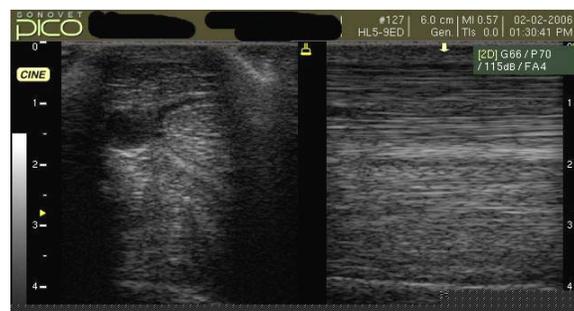


Figure 2: February 2, 2006

A reevaluation was performed on February 2, 2006. The patient was grade 1/5 lameness with no swelling noticeable of the right rear limb. On ultrasound evaluation of the 1B area (Fig 2), there was marked improvement in the echogenicity of the suspensory ligament on cross sectional and on longitudinal evaluation. On the longitudinal scan the linearity of the fiber pattern was very consistent with normal fiber patterns. This was only 26 days post-regenerative cell therapy and 34 days post -injury. The rehabilitation continued with increased workouts and some under saddle at 60 days. Reevaluation was scheduled to be done at 90 days post-injury.



Figure 3: March 30, 2006

The horse was presented for evaluation at 92 days post-injury. There was no detectible lameness at a walk or at a trot. Lunge line evaluation showed no lameness going in a circle left or right at a walk or trot. Ultrasound evaluation of the suspensory ligament at the 1B level showed much improved echogenicity of the ligament on cross section and longitudinal sections.(Fig. 3) At only 84 days post regenerative cell therapy ,the echogenicities were comparable to the ultrasounds of normal ligaments. The rehabilitation was increased to include trotting under saddle and currently the horse has been performing at its prior level of competition.