

Case 042606-03: Fifteen-year old Hanoverian Cross Suspensory Branch Desmitis

A fifteen-year-old Hanoverian cross dressage horse was presented for lameness in the right front limb. On examination, it was determined that MCIV had fractured at the distal aspect with significant displacement. An ultrasound evaluation determined that there was major damage to the lateral branch of the suspensory and minor changes to the medical branch subsequent to the fracture (Fig 1).

Based on the ultrasound evaluation, a diagnosis of acute desmitis was made. There was a 2 cm area of enlargement in the right lateral branch in comparison to the left. There was also a core lesion present in the right branch. The enlargement and core lesion gave the horse a guarded to fair prognosis for returning to competition.

After reviewing the clinical findings and with consideration of the owner's expressed interest for returning their horse to full work, the staff veterinarians elected the use of regenerative cell therapy. Their hope was to reduce the risk of scarring and to optimize the strength of the ligament. An 8.91 gram sample of subcutaneous fat was removed from the area lateral to the tail head and submitted to Vet-Stem, Inc. for stem and regenerative cell recovery. After surgery was performed to remove the displaced bone, the attending clinician utilized ultrasound guidance and injected the lateral branch of the right front suspensory with harvested cells. A therapeutic dosage of 6.5 million regenerative cells contained in a 2 ml volume was administered.

Following the regenerative cell injection, a rehabilitation program was instituted. At the one month recheck exam, there was no pain elicited on palpation and no lameness was observed. An ultrasound performed at the 4 month post-injection exam (Fig. 2) showed significant improvement in the appearance of the ligament; there was filling in of the core lesion, decreased size of the lateral branch and an almost normal pattern of the fibers.

This patient continued to steadily improve after regenerative cell therapy was administered and has now returned to a full work schedule.



Figure 1: April of 2006



Figure 2: August 28, 2006