Case 042705-05: Five-year Old Reining Quarter Horse
Proximal suspensory Desmitis

A five-year-old Reining Quarter Horse was presented for chronic lameness in the right and left hind limbs. Physical exam determined the lameness to originate in the proximal suspensory ligament. On ultrasound evaluation both suspensory ligament origins showed the classic "moth-eaten" appearance of degenerative suspensory ligament desmitis (fig 1). Considering the patient had the same injury in both hind limbs, this horse had a guarded prognosis for returning to competition.

After reviewing the findings of both the physical exam and the ultrasound, the veterinarian decided to use regenerative cell therapy. His hope, as well as the owner's, was that this specific type of therapy would reduce the risk of scarring, optimize the strength of the ligament, and allow the horse to return to his prior level of performance in a high impact sport.

An 18.18 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. With ultrasound guidance, the attending clinician injected both hind limbs at the origins of the suspensory ligaments. A therapeutic dosage of 3.7 million regenerative cells contained in a 2 ml volume was administered at each site.

Following the regenerative cell injection, a rehabilitation program was instituted. At the three month recheck exam, the attending veterinarian was unable to elicit pain on palpation or detect lameness at any gait. An ultrasound performed at this time showed significant improvement in the appearance of the ligament: there was filling in of the lesion, there was no evidence of the prior moth-eaten appearance of the ligament, and the development of a normal pattern of fibers was starting to appear. (Fig 2) This reining horse continued to steadily improve and returned to a full work schedule within 12 months of administration of regenerative cells.
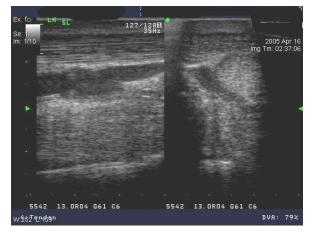

Figure 1: April 2005

Figure 2: July of 2005