

Case 020805-01: 19 Year Old Dressage Horse Superficial Flexor Tendonitis

On February 7, 2005, a 19 year-old Dutch Warmblood gelding presented for lameness evaluation. Previously competing in Gran Prix level Dressage, owner interview revealed the horse suffered an acute bow of the left front limb in November 2004. Following ninety days of stall rest, the owner presented the horse as a candidate for stem cell therapy. Ultrasound evaluation of the left front flexor tendons revealed a centralized lesion of the superficial digital flexor tendon extending from zone 1A to 2A.

Under moderate sedation and local anesthesia, 19 grams of subcutaneous adipose tissue were recovered from the left coccygeal region, dorso-lateral to the tail head and submitted for stem cell recovery. On February 9, 2005, 8 million viable cells were delivered to the lesion by ultrasound guided tendon injection. The patient was discharged and stall rested for 10 days.

Evaluation on February 21, 2005 found the flexor tendon region to be normal in appearance, absent of swelling or edema at the site of stem cell injection. Evaluation of the collection site revealed excellent skin apposition, no discharge, or swelling. A rehabilitation program of gradually increased hand walking was initiated with ultrasound evaluations scheduled at 30 to 60 day intervals.

Ultrasound evaluation of the left front flexor tendons on March 21 (6 weeks following stem cell therapy) revealed marked improvement in sonographic appearance of the tendon. On lameness exam, the patient was observed to be sound at the trot. The rehabilitation program was increased to include trotting and cantering by 8 weeks post treatment.

On May 23, 2005, ultrasound evaluation showed marked improvement in echogenicity of the superficial flexor tendon in Zone 1A. On longitudinal view, pattern alignment was noted to be improving and approaching normal alignment. On lameness evaluation, the horse was sound at a walk, trot, and canter.

In June of 2005, the owner returned the horse to its original fitness and training program. Following 90 days of conditioning, in September of 2005 the owner and horse returned to Gran Prix level competition and have been actively showing for 3 months without any indications of residual lameness or discomfort.

Note: Images were lost due to computer hard drive failure at the clinic.