

Case 062905-01: Two Year Old Quarter Horse Colt Stifle Osteochondrosis Dissecans

On June 21, 2005, a two-year old Colt was presented with a grade 2/5 left hind lameness. On high flexion test the left hind became a 3.5/5 lame. The attending clinician performed regional nerve and intra-articular blocks with carbocaine and isolated the lameness to the left stifle. Further diagnostic evaluation with digital radiographs showed mild to moderated flattening of the medial femoral condyle. The attending veterinarian determined that arthroscopy combined with regenerative cell therapy was the best choice at this time to facilitate healing.

On June 28, 2005, 16.87 grams of subcutaneous adipose tissue was collected from just lateral to the tail head and submitted for recovery of regenerative cells. On July 1, 2005, arthroscopy was performed on both stifle joints. The left stifle required debridement of a chondromalasia lesion of the medial femoral condyle. This lesion was moderate-sized and was in close proximity to the major weight-bearing surface of the medial aspect of the joint. There were no chondromalasia lesions of the lateral femoral condyle noted. Micro fracture of the subchondral bone of the medial femoral condyle was performed. The right stifle chondromalasia lesion of the medial femoral condyle was approximately 10-15% smaller than that found in the left. Microfracture of the subchondral bone was performed. Adipose derived regenerative cells (4.3 million each site) were injected into the medial femorotibial joint prior to closing. Prognosis for a long term athletic soundness was said to be 80%

On February 2, 2006 a reevaluation was performed. Prior to this exam two series of Legend and Adequan injections had been administered. The patient was sound when trotted in hand and 1.5/5 lame on upper limb flexion test. On August 9, 2006 the colt was observed to be sound in both hind limbs and on all components of the physical exam.

On August 23, 2006 , the horse had continued to be sound for six months and a one year follow up reevaluation with arthroscopy was performed. The left medial femoral condyle cartilage repair tissue appeared thin and somewhat translucent. The defect was completely covered; however, some cartilage fracture lines were still present in the debrided area of the remaining cartilage. There was minimal synovial inflammation noted in the left stifle. The right medial femoral condyle cartilage repair tissue appeared thicker than on initial arthroscopy and was nearly flush to the surrounding cartilage. The defect was completely covered with repair cartilage that was relatively smooth with a swirling fiber appearance. As with the left stifle, the right stifle showed minimal synovial inflammation

Presently, the colt is in training and has not presented any lameness issues.

Note: Images not available due to computer hard-drive failure at clinic.