

Client Header and Name Removed - Sample Document Anonymized

PATIENT: Americus Vespuccio
DOB: 07/13/1102
FILE #: 56789
PHYSICIAN: DR. Viking
EXAM: MRI SCAN OF THE RIGHT KNEE
DATE: 08/06/1142

CLINICAL INDICATION

40-year-old male with pain. Possible ACL tear. No history of injury.

TECHNIQUE

Imaging was performed in the coronal plane with T1-weighting and with a fast spin echo inversion recovery sequence. This was followed by sagittal fast spin-echo proton-density and T2-weighted sequences, followed by a sagittal 3D volume gradient-echo sequence. This was followed by axial fast spin-echo T2-weighted sequences with fat suppression.

FINDINGS

Ligaments: There is a complete tear of the anterior cruciate ligament with the distal half lying somewhat horizontally in the intercondylar notch. The proximal half of the anterior cruciate ligament is not clearly identified, with some intermediate signal intensity material in this region. These findings are best seen on sagittal T2 images 13 through 16. The posterior cruciate ligament appears intact, without evidence of bowing. The medial collateral ligament shows moderate surrounding edema. Some areas of internal intermediate signal intensity are also identified in the proximal portion of the medial collateral ligament. Some of the posterior fibers of the medial collateral ligament also appear to be disrupted (coronal STIR images 7 through 9 and axial proton-density images 13 through 15). The iliotibial band, fibular collateral ligament, and biceps femoris appear intact. The proximal portion of the popliteofibular ligament is ill-defined (coronal STIR image 5).

Menisci: The medial and lateral menisci are normal in size and morphology, without evidence of tear. The meniscal roots appear intact. There is no evidence of meniscal extrusion, parameniscal cyst formation, or displaced meniscal fragments.

Osseous structures and articular surfaces: Numerous areas of bone marrow contusion are identified, including in the anterior portion of the lateral femoral condyle and posterior portion of the lateral tibial plateau, as well as in both the anterior and posterior portions of the medial tibial plateau. There is an impaction deformity in the anterior portion of the lateral femoral condyle (sagittal T2 images 21 and 22) with a small subchondral low-signal-intensity line noted on the coronal T1-weighted images in this region, compatible with a small fracture line (coronal T1 images 10 through 12). No loose bodies are identified. Mild signal heterogeneity of the patellar and trochlear articular surfaces is seen. The articular surfaces of the medial and lateral femorotibial compartments are unremarkable.

Extensor mechanism: The quadriceps tendon and patellar tendon are intact. Hoffa's fat pad appears intact. The patellar retinacular structures are grossly unremarkable.

Miscellaneous: Extensive subcutaneous edema is seen surrounding the knee. There is a large suprapatellar effusion with moderate synovitis. A popliteal cyst is identified which extends approximately 4.8 cm craniocaudally. The popliteus tendon appears intact. Mild edema is identified around the popliteus and soleus muscles in the calf (coronal STIR images 1 through 3 and axial proton-density images 17 through 22).

IMPRESSION

1. COMPLETE TEAR OF THE PROXIMAL ANTERIOR CRUCIATE LIGAMENT WITH THE DISTAL ACL LYING HORIZONTALLY IN THE INTERCONDYLAR NOTCH. GRADE-2 SPRAIN OF THE MEDIAL COLLATERAL LIGAMENT IS ALSO IDENTIFIED, WITH SOME INTERMEDIATE SIGNAL INTENSITY WITHIN THE MCL PROXIMALLY AND SOME DISCONTINUOUS POSTERIOR FIBERS IDENTIFIED. NO EVIDENCE OF COMPLETE MCL TEAR.
2. NO EVIDENCE OF MENISCAL TEARING.
3. AREAS OF BONE MARROW CONTUSION INVOLVING THE ANTERIOR PORTION OF THE LATERAL FEMORAL CONDYLE AND POSTERIOR PORTION OF THE LATERAL TIBIAL PLATEAU. AN IMPACTION DEFORMITY IS ALSO IDENTIFIED IN THE ANTERIOR LATERAL FEMORAL CONDYLE WITH A SMALL ASSOCIATED SUBCHONDRAL FRACTURE LINE IN THIS REGION.
4. ADDITIONAL AREAS OF BONE MARROW EDEMA ARE IDENTIFIED IN THE MEDIAL TIBIAL PLATEAU, BOTH ANTERIORLY AND POSTERIORLY, ALSO COMPATIBLE WITH CONTUSIONAL INJURY.
5. IRREGULARITY OF THE PROXIMAL PORTION OF THE POPLITEOFIBULAR LIGAMENT, WHICH MAY BE DUE TO TEARING. THIS RAISES CONCERN FOR INJURY TO THE POSTEROLATERAL COMPLEX. EDEMA IS ALSO SEEN TRACKING IN THE FASCIAL PLANES AROUND THE POPLITEUS AND SOLEUS MUSCLES.
6. LARGE SUPRAPATELLAR EFFUSION WITH MODERATE SYNOVITIS.

THIS REPORT WAS ELECTRONICALLY SIGNED

Anita Newknee, M.D.

AR/wa