Clinical Details: Giving way of left knee post THR.

Technique: Multiplanar multi sequence images were acquired through the left knee.

Findings:

MENISCI:

Medial meniscus: A tear is observed in the anteromedial aspect of the lateral meniscus. Mucoid degeneration is observed in the anterior horn of the lateral meniscus there is marked extrusion of the meniscus into the coronary recess.

Lateral meniscus: No tear is seen in the medial meniscus. There is however mucoid degeneration.

CRUCIATE LIGAMENTS:

Anterior cruciate ligament (ACL): Intact normal thickness orientation and signal.

Posterior cruciate ligament (PCL): Intact. Normal low signal and fibre continuity.

COLLATERAL LIGAMENTS AND CORNER STRUCTURES:

Medial collateral ligament (MCL): Normal signal and contour. No thickening or periligamentous oedema.

Lateral collateral ligament (LCL): There is bulging of the lateral collateral ligament.

CARTILAGE (CHONDRAL SURFACES):

Patellofemoral joint: Mild chondral fibrillation is observed in the medial patellar facet and patellar groove.

Medial and lateral compartments: Full-thickness chondral loss is observed in the lateral tibiofemoral joint. Cartilage is preserved in the medial tibiofemoral joint.

TENDONS:

Quadriceps and patellar tendons: Normal thickness and signal no tendinosis or tear.

Popliteus Tendon and Iliotibial band: unremarkable.

BONE MARROW:

Subchondral oedema is observed in the lateral femoral condyle and proximal tibial metadiaphysis.

No marrow oedema, osteochondral lesion or subchondral cysts.

JOINT EFFUSION AND SYNOVIUM:

A moderate mount of fluid and synovial hypertrophy is observed in the patellofemoral joint

BURSAE AND CYSTS.

No Baker's cyst.

There is fluid prepatellar bursa.

OTHER OBSERVATIONS:
No evidence of intra-articular loose body.

ALIGNMENT OF JOINT SURFACES.
There is knee joint narrowing with osteophytic lipping extending from the medial and lateral aspects of the tibiofemoral joints.
There is also mild osteophytosis in the patellofemoral joint

Conclusion: There is tricompartmental degenerative joint disease (OA). Most marked in the lateral knee joint.
A tear is identified in the anteromedial lateral meniscus with extrusion into the coronary recess. There is resulting bulging of the lateral collateral ligament and iliotibial band.
Grade IV chondromalacia is seen in the lateral tibiofemoral joint. Grade I-II chondromalacia in the patellofemoral joint.
Subchondral oedema in the lateral knee joint reflects a degenerative bone stress response.
Inflammatory changes observed in the suprapatellar bursa.
There is mild prepatellar bursitis.

Dr Paul Lowenstein

Click here to view images