

CLINICAL HISTORY: 19 year-old male with an injury in March thrown over a snowmobile with pain in both knees, much worse on the right.

TECHNIQUE: Multiplanar, multisequence fat and water weighted images of the right knee were performed.

FINDINGS: **A large hyperextension marrow contusion/osteochondral injury is associated with edema along the anterior margin of the tibial plateau propagating into the metadiaphysis with edema measuring 6 cm transverse x 3 cm AP and extending along the tibial tubercle.** There is a milder contusion of the medial femoral condyle. The lateral femoral condyle and lateral condylopatellar sulcus of the femur, popliteus tendon and posterior lateral corner of the tibia are intact.

Intact ACL. **At the midsubstance of the PCL along the meniscomfemoral ligament is a high-grade PCL tear.** The PCL insertion is normal. The quadriceps and patellar tendons are normal.

Intact collateral ligaments, popliteus tendon and posterior lateral corner of the tibia.

No medial or lateral meniscal tear. No discoid meniscus, flap or fragment.

Mild lateral patellar tilt without subluxation, retinacular tearing or high-grade patellofemoral cartilage loss. There is slender intra-articular medial synovial plica and a moderate joint effusion and hemarthrosis.

IMPRESSION (MRI OF THE RIGHT KNEE):

1. **The PCL exhibits high-grade tearing at its midsubstance.**
2. Intact ACL, collateral ligaments and popliteus tendon and posterior lateral corner of the tibia.
3. **A large hyperextension marrow contusion is noted along the anterior tibial plateau and a milder contusion of the anterior medial femoral condyle.**
4. No meniscal tear.
5. A moderate joint effusion or hemarthrosis and non thickened synovial plica are identified.