SAMPLE REVIEW:

FEMUR, SHOULDER, KNEE

IMAGING LAW

Advanced Medical Imaging Consultation

Contents are confidential. Please be respectful of privacy.

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Right femur x-ray dated 11/25/2018. No fracture identified. Mild degenerative disease right knee.

Mild prepatellar soft tissue swelling (arrow).

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Left femur x-ray dated 11/25/2018. No fracture identified. Mild degenerative disease left knee.

Mild prepatellar soft tissue swelling (arrow).

Right humerus x-ray dated 11/25/2018. Normal alignment, and no fracture. Mild degenerative disease in the right shoulder.

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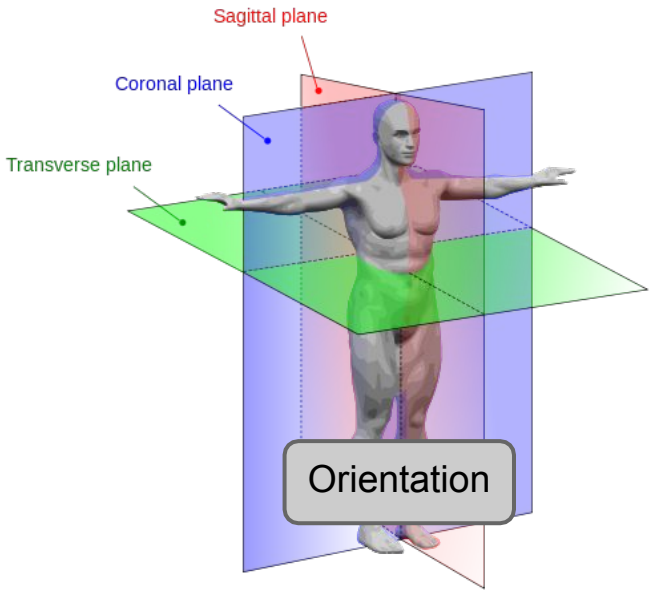
MRI of the left knee dated 2/2/2019, sagittal image. This shows a small joint effusion (blue arrow), and mild prepatellar soft tissue swelling and small fluid collection (yellow arrow). The prepatellar swelling and fluid is at the front of the knee, and this is consistent with a small traumatic subacute hematoma that has nearly resolved.



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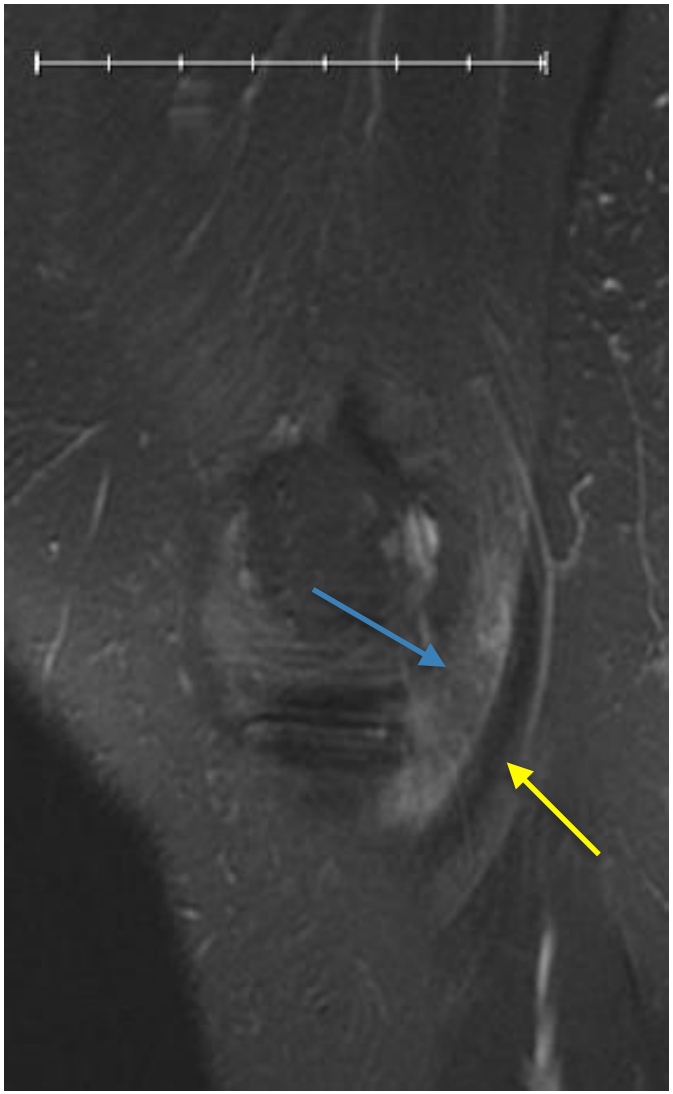
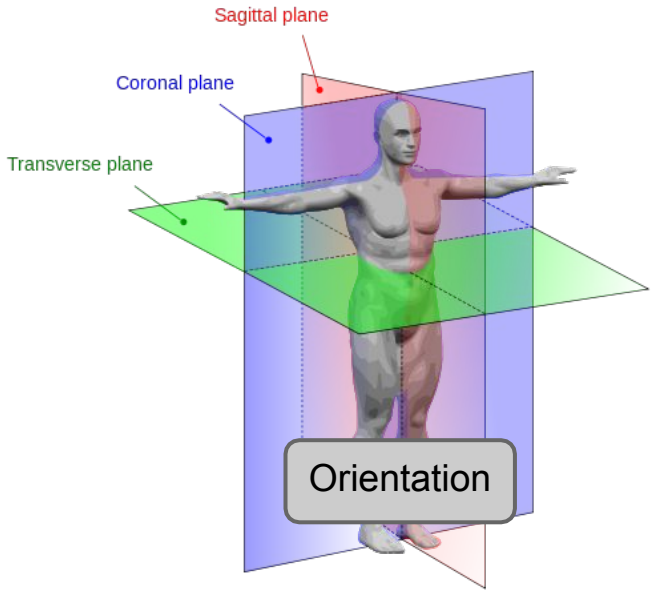
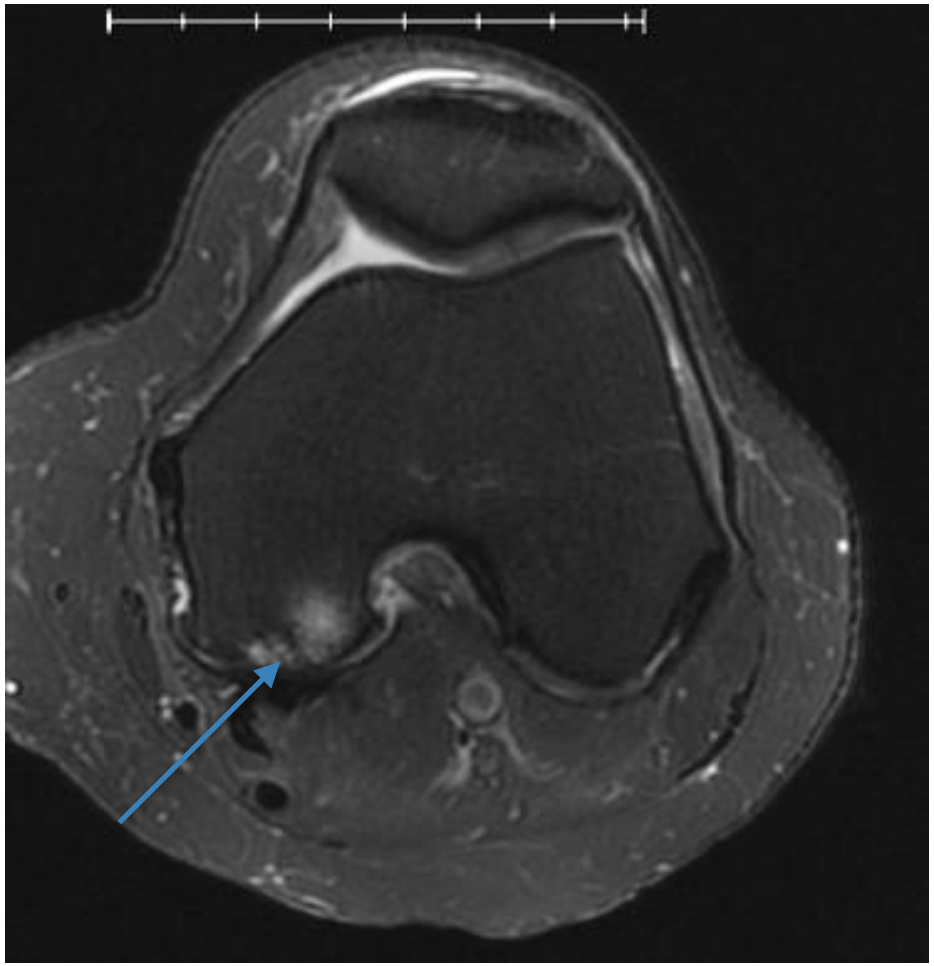
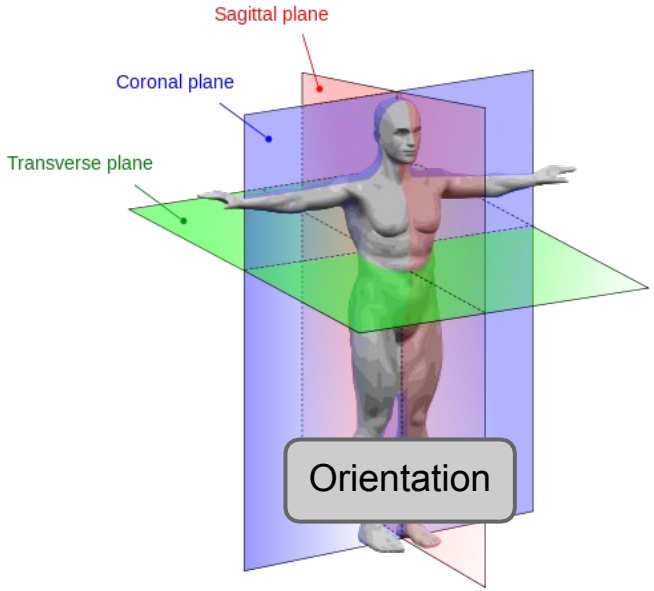


MRI of the left knee dated 2/2/2019, sagittal image. This shows mild soft tissue swelling (blue arrow) adjacent to the semimembranosus tendon (yellow arrow) in the posteromedial aspect of the knee. This represents a subacute tendon strain. No tendon tear.





MRI of the left knee dated 2/2/2019, axial image. This shows mild bone marrow edema in the posterior aspect of the medial femoral condyle (arrow). Overlying high grade cartilage thinning due to degenerative disease, therefore this edema is consistent with stress reaction related to degenerative disease rather than traumatic related.



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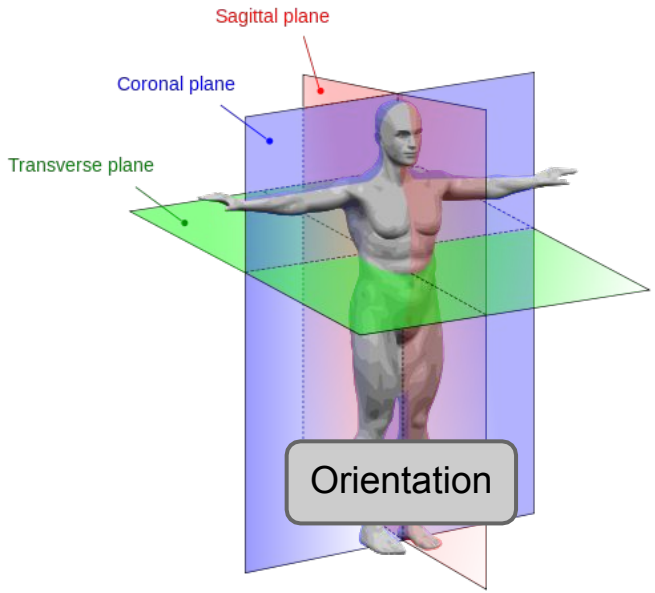
MRI of the left knee dated 2/2/2019, sagittal image. This shows chronic degeneration of the medial meniscus posterior horn (arrow). No evidence of a meniscal tear. Collateral and cruciate ligaments (not shown) are also intact without tear.



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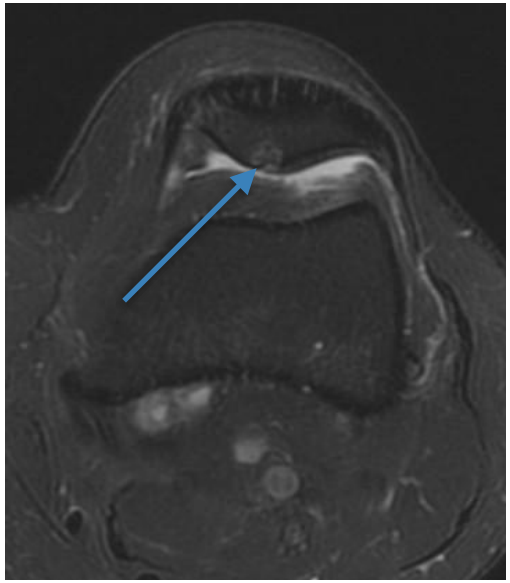
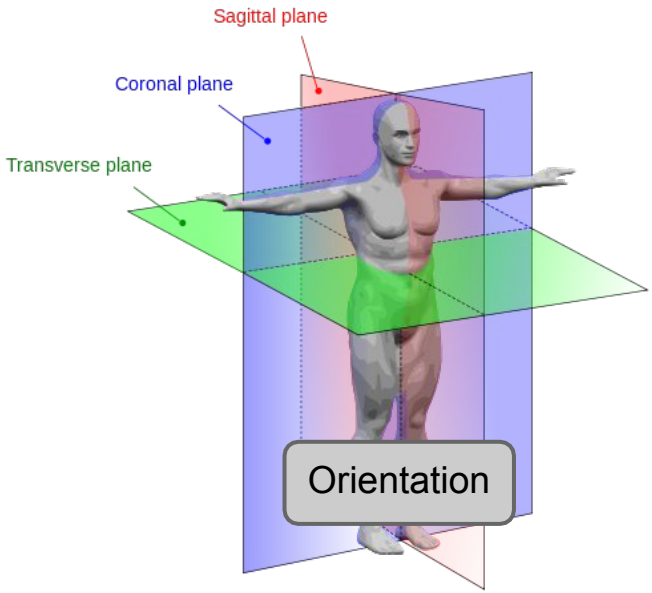


MRI of the left knee dated 2/2/2019, axial and sagittal images. This shows small area of chronic full thickness cartilage loss in the upper patella, with mild subchondral stress reaction (arrows). This is a degenerative related finding. No fracture identified.



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MRI exams of the cervical, thoracic, and lumbar spine dated 5/15/2015 reviewed. Based on medical record review, patient had a previous motor vehicle accident on 4/5/2015. No reported back pain or neck pain after the accident in question.

Cervical spine MRI showed chronic moderate multilevel degenerative disease, most prominent at C5-6 where there was moderate central canal stenosis with minimal chronic cord impingement. Minimal chronic disc herniation at this level. Moderate-marked multilevel neural foraminal stenosis secondary to degenerative facet and disc disease.

Thoracic spine MRI showed a few minimal chronic disc herniations, with no cord compression.

Lumbar spine MRI showed mild to moderate chronic multilevel degenerative disease, most prominent at L4-5 and L5-S1.

The findings on these spine MRIs are all chronic and degenerative related, and were documented more than 3 years prior to the accident in question and therefore unrelated.

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My Question:

Patient fell off a bike after being hit by a car on 11/25/2018. Patient had right arm and bilateral upper leg pain at the Emergency Department after the accident. Persistent left knee pain that led to an MRI being performed a few months later. Evaluate for any injury attributable to the accident.

My Response:

X-rays of the right humerus, right femur, and left femur obtained the day of accident demonstrated no fractures. Mild degenerative disease in the bilateral knees and right shoulder. Mild bilateral knee prepatellar soft tissue swelling, indicative of mild traumatic soft tissue contusions related to the fall.

MRI of the left knee was then performed a few months later for persistent knee pain. This showed mild subacute traumatic soft tissue injuries related to the accident, including a low grade tendon strain in the posteromedial knee and a small hematoma in the anterior subcutaneous tissues that had nearly resolved. Small joint effusion. No fracture identified, and intact collateral and cruciate ligaments. Chronic meniscal degeneration without a tear. Small areas of chronic high grade cartilage thinning noted in the medial femoral condyle and patella, with associated mild subchondral stress reaction. These bony changes are related to pre-existing chronic degenerative disease, and are unrelated to the accident in question with a reasonable degree of medical certainty. No high grade structural damage to the left knee related to the accident in question is identified, with no ligament or tendon tear.

In summary, the patient had mild traumatic soft tissue injuries to the left knee related to the accident in question which had nearly resolved on MRI performed a few months later. Mild traumatic soft tissue injury also noted on x-ray of the right knee on date of accident. No fracture identified. Additional chronic degenerative disease in the left knee on MRI, including areas of chronic high grade cartilage thinning with associated subchondral stress reaction. With a reasonable degree of medical certainty, there is no significant structural damage to the left knee related to the accident in question, and no other traumatic abnormality is identified on any of the submitted imaging.