

SAMPLE REVIEW #1

CERVICAL SPINE, LUMBAR SPINE, TMJ

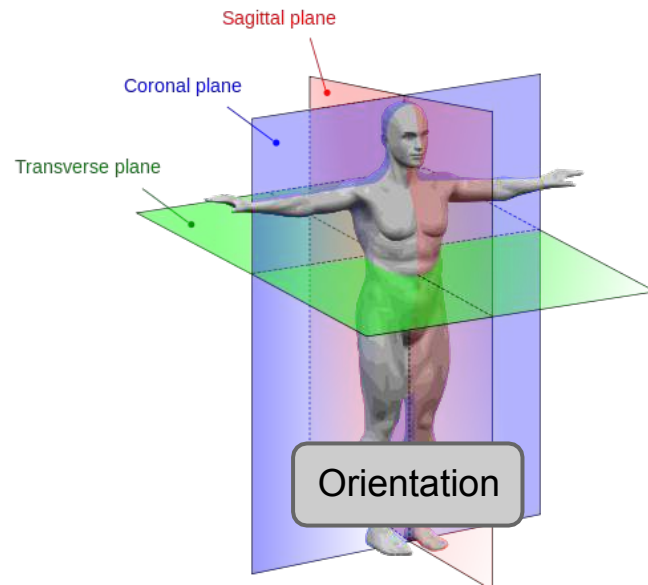


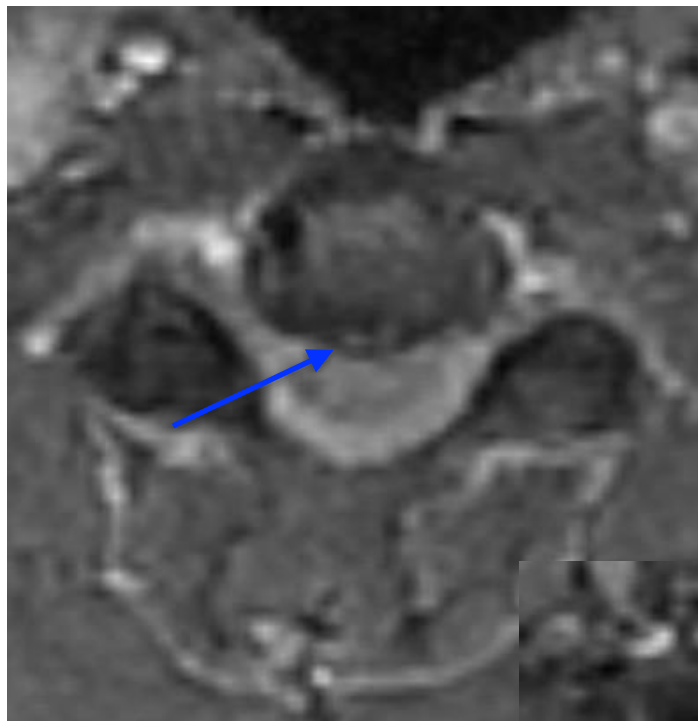
Advanced Medical Imaging Consultation

Contents are confidential. Please be respectful of privacy.

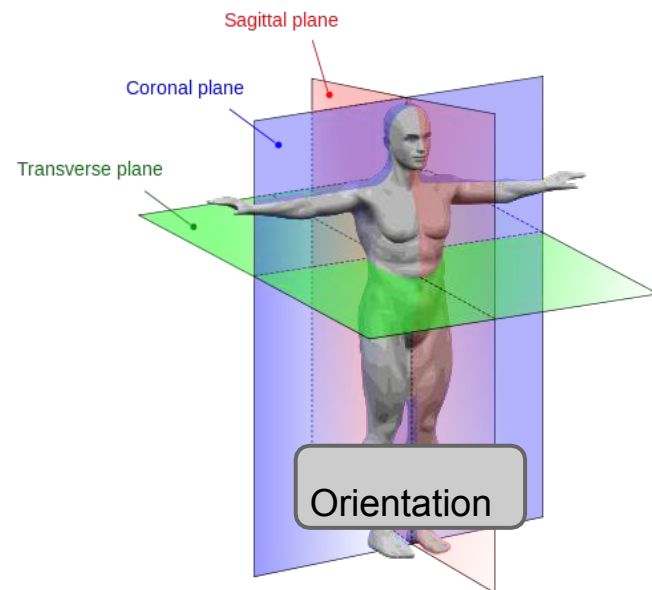
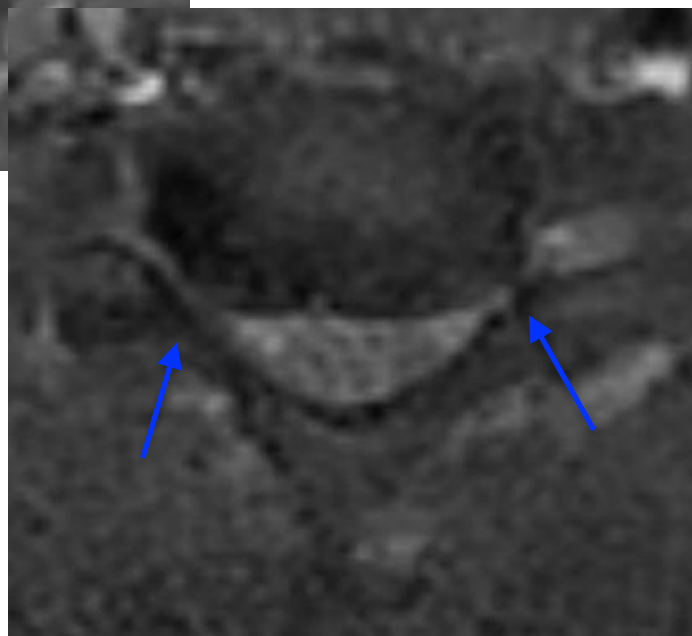


MRI of the cervical spine dated 3/5/2014, sagittal T2 image. Moderate-marked chronic multilevel degenerative disease, with chronic cord impingement at C3-4 and C4-5 (arrows). Chronic cervical straightening related to the degenerative disease. No acute fracture or subluxation, and no evidence of a traumatic cord contusion or acute disc herniation.



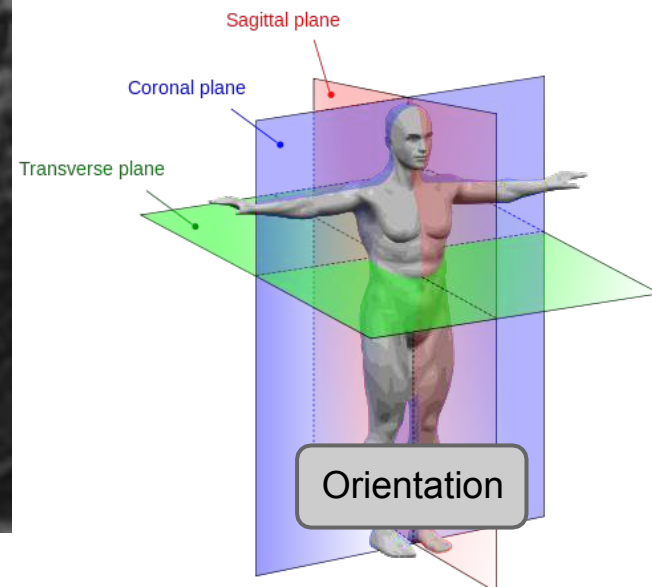
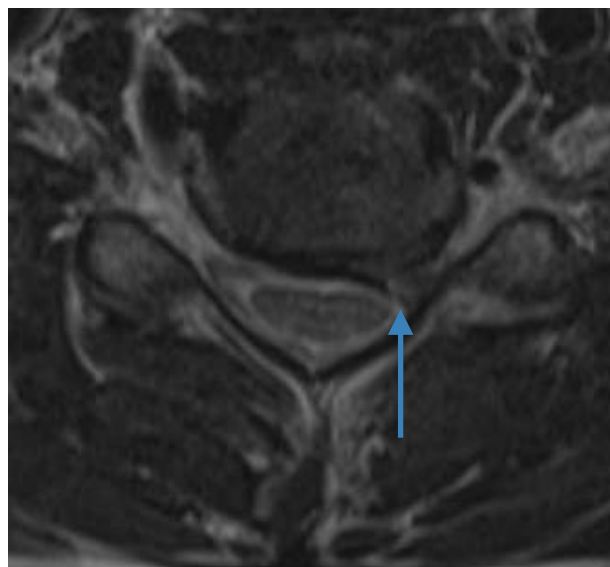


MRI of the cervical spine dated 3/5/2014. Axial image on the left at C3-4, and below axial image at C6-7. The left image shows a chronic C3-4 minimal central protrusion type disc herniation (arrow), with chronic cord impingement. The below image shows marked chronic bilateral neural foraminal stenosis at C6-7 (arrows), secondary to marked degenerative disease.





MRI of the cervical spine dated 1/24/2017, sagittal T2 image on left and below image is an axial image at the level of C5-6. Again noted is chronic multilevel degenerative disease, with slight interval worsening of marked disc disease from C3-4 through C6-7. New large left sided disc herniation is present at C5-6 (arrows), causing impingement of the left C7 nerve in the lateral recess, and also possibly the exiting C6 nerve root in the foramen. This is unrelated to the accident in question.



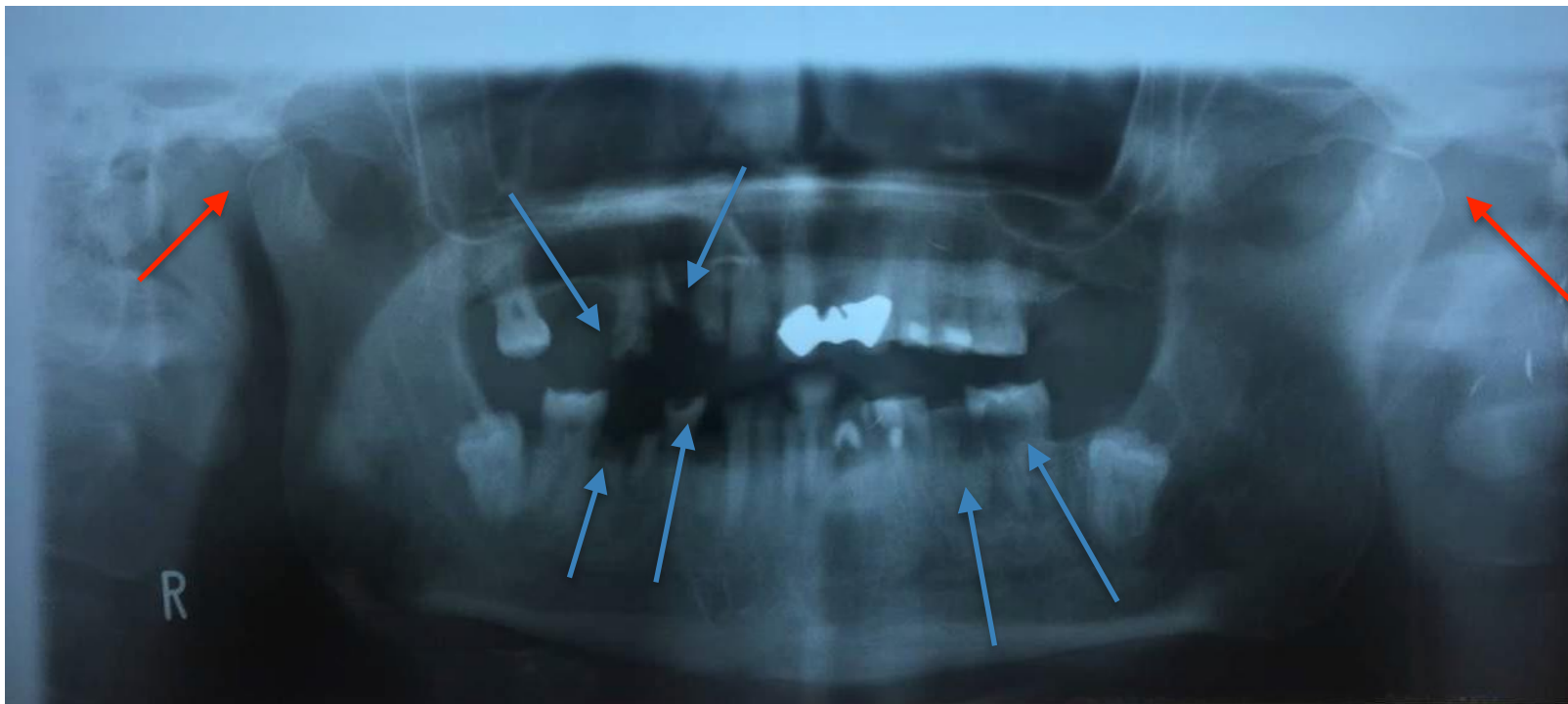


Cervical spine x-ray dated 9/10/2014. Chronic cervical spine straightening, with no subluxation. Chronic moderate-marked multilevel degenerative disease as seen on previous MRI, with no fracture. No acute findings. No instability on the flexion and extension lateral views (not shown).

No significant change on the subsequent 2016 x-ray.



Lumbar spine x-ray dated 9/10/2014. Normal alignment, and no fracture. Mild chronic multilevel degenerative disease is present.

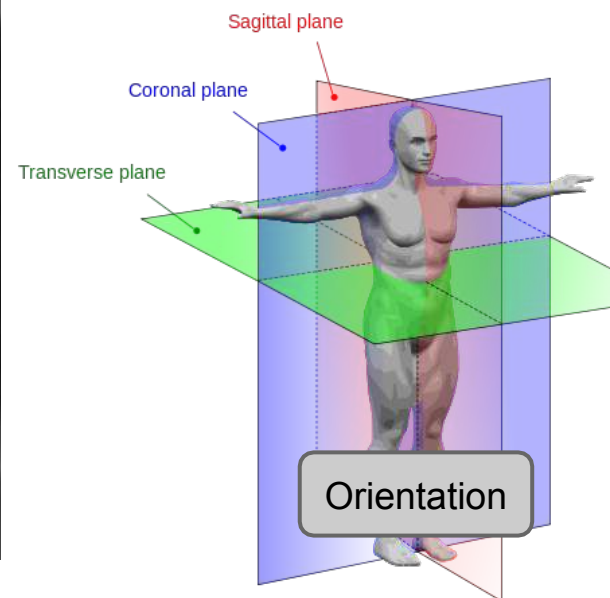
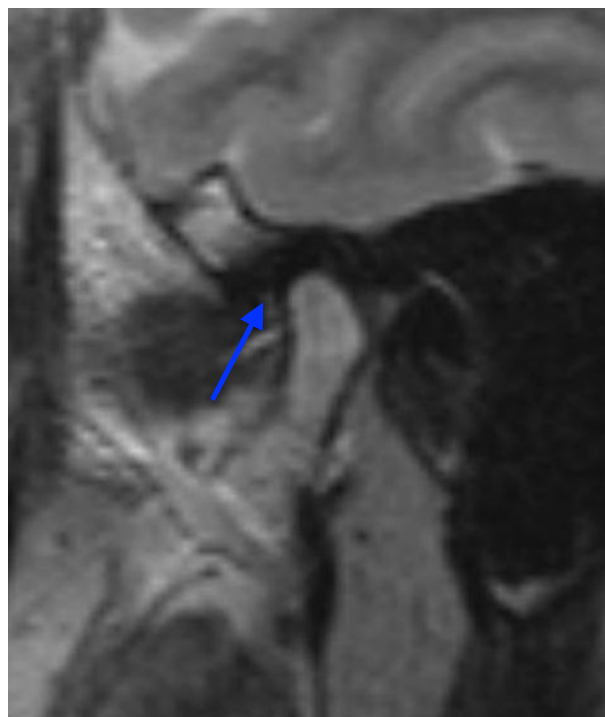


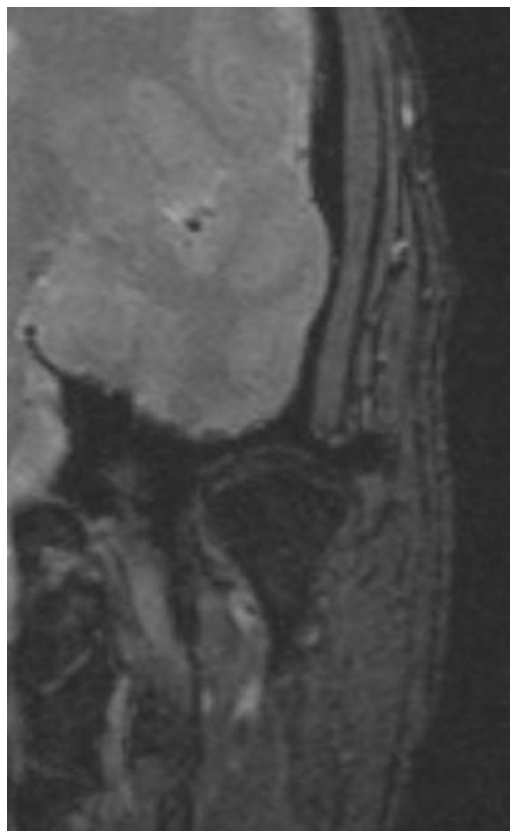
Panorex radiograph dated 6/24/2014. This shows marked dental disease, with multiple caries involving the maxillary and mandibular teeth (blue arrows).

Note is made of anterior subluxation of the mandibular condyles of both temporomandibular joints (red arrows).

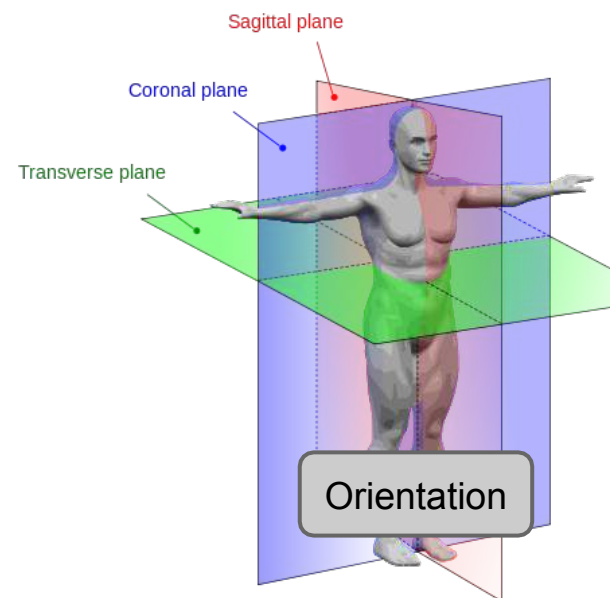
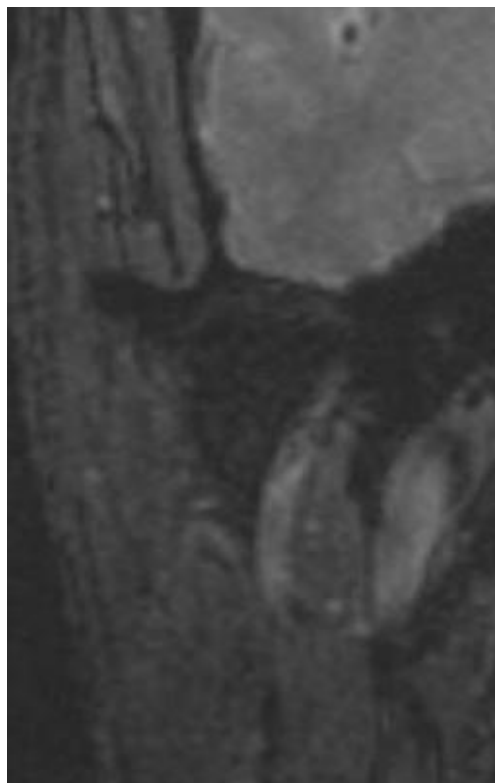


Temporomandibular joint (TMJ) MRI dated 7/8/2014. Sagittal T2 images, the left image is of the left TMJ, and the right image is the right TMJ. Both in the closed mouth position. This shows normal alignment, and normal position of the articular disc (arrows).





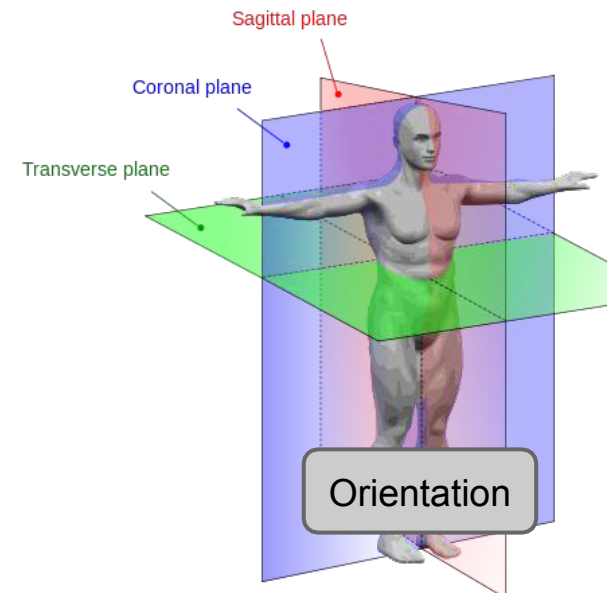
TMJ MRI dated 7/8/2014. Coronal T2 images, the left image is of the left TMJ, and the right image is the right TMJ. Both in the closed mouth position. This shows normal alignment, and no joint effusion or fracture. No displacement of the disc.





TMJ MRI dated 7/8/2014. Sagittal T1 images, the left image is of the left TMJ, and the right image is the right TMJ. Both in the open mouth position. This shows normal anterior subluxation of the mandibular condyles in relation to the temporal glenoid fossa.

The articular disc is poorly visualized and evaluated. On a technical level, this MRI is suboptimal for TMJ evaluation due to lack of T2 images in the open mouth position. Therefore, unable to truly evaluate the position of the disc in the open mouth position.



**My
Question:**

Motor vehicle accident on 2/14/2014, with neck pain and temporomandibular joint (TMJ) pain. Evaluate for any injury attributable to the accident in question.

**My
Response:**

Regarding the cervical spine, there is chronic moderate to marked multilevel degenerative disease. Associated chronic cord impingement at C3-4 and C4-5, and marked bilateral neural foraminal stenosis at C6-7. Minimal chronic disc herniation is present at C3-4. No traumatic disc herniation is identified, with a reasonable degree of medical certainty. Chronic degenerative related straightening is seen, with no fracture or subluxation. No acute traumatic abnormality in the cervical spine is seen. Follow up x-ray also shows chronic multilevel degenerative disease, with no acute findings. Large left sided disc herniation at C5-6 is seen on the 2017 MRI, with impingement of at least one nerve root. This was not present on the 2014 MRI, and is unrelated to the accident in question.

Lumbar spine x-ray taken nearly seven months after the trauma shows no fracture or subluxation, and mild degenerative disease.

Panorex radiograph obtained 4 months after the trauma shows marked dental disease, with multiple caries. Anterior subluxation of the mandibular condyles is seen at both TMJs. This may be due to an open mouth position during image acquisition, however is of uncertain etiology.

TMJ MRI obtained nearly 5 months after the trauma shows no fracture or joint effusion. Normal alignment on the closed mouth views, with normal position of the articular disc. The TMJ subluxation seen on the earlier panorex is therefore most likely incidental and transient, and potentially projectional artifact. The MRI is limited on a technical level in evaluating the disc in the open mouth position. No traumatic abnormality of the bilateral TMJs is seen by MRI, with a reasonable degree of medical certainty. MRI has an increased sensitivity for TMJ pathology compared to plain x-ray.

In summary, there is no traumatic injury identified on the images submitted attributable to the accident in question.