Cassidy Messer

Joti Gill

CT Reflection #1.

1 September 2026

CT Reflection #1.

Getting to learn about CT scanning of the head has improved my understanding of both diagnostic imaging and neuroanatomy. A CT head scan is a diagnostic procedure that uses radiation and computer processing to create very detailed cross-sectional images of the skull, brain, and surrounding tissues. From what I have learned, the process begins with confirming the patient's identity, reviewing the examination request and relevant clinical history, and ensuring the patient is properly prepared for the procedure. The patient is positioned supine on the CT table, usually with their head placed between sponges to minimize movement. Correct positioning is important because patient motion can cause artifacts and reduce image quality. We then also use positioning lasers and scout images to plan the scan range and acquisition.

During image acquisition, the CT scanner rotates an X-ray tube and detectors around the patient's head while collecting attenuation data from different angles. This information is processed by a computer to create axial images, which can also be reconstructed into coronal and sagittal planes. Depending on the clinical indication, IV contrast may be used to better demonstrate blood vessels, abnormalities, or areas of altered enhancement.

My understanding of CT head scanning has also enhanced my understanding of neuroanatomy because it allows me to visualize anatomical structures in cross-sectional images rather than only through regular x-rays, diagrams or textbooks. For example, identifying the lateral ventricles, vertebrates, cerebellum, and different lobes of the brain on sequential CT images has helped me understand their locations and relationships to one another. CT imaging demonstrates how structures change in appearance as the images move superiorly through the head.

Overall, learning about CT head scanning has helped connect my knowledge of anatomy with clinical imaging. As an MRT student, I believe that understanding both the technical process and the anatomy being demonstrated is essential for producing diagnostic images and providing safe, effective patient care.