

E102196290

**Study: CT of the brain with contrast**

Indication: 45-year-old male presenting with V1 pain and vertigo. Clinical concern for mastoiditis.

Comparison: No prior studies are available for comparison.

Technique: Contiguous axial images were obtained from the skull base to the vertex following the administration of 70 cc of Omnipaque 350 intravenous contrast.

**Findings:**

There is a 1.3 cm ring-enhancing mass in the left corona radiata and additional 1.9 cm ring-enhancing mass in the white matter of the left occipital lobe with surrounding vasogenic edema. In the right hemisphere, there is a right temporal lobe rim-enhancing lesion measuring up to 2.9 cm with surrounding vasogenic edema.

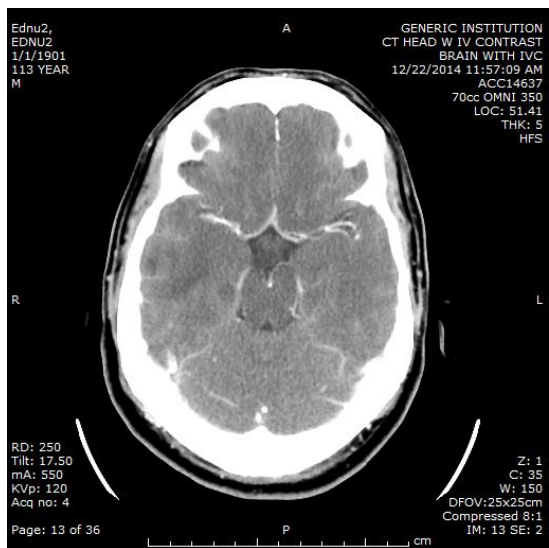
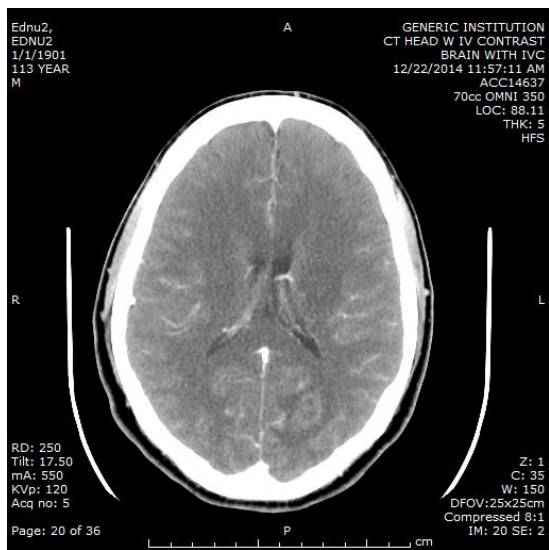
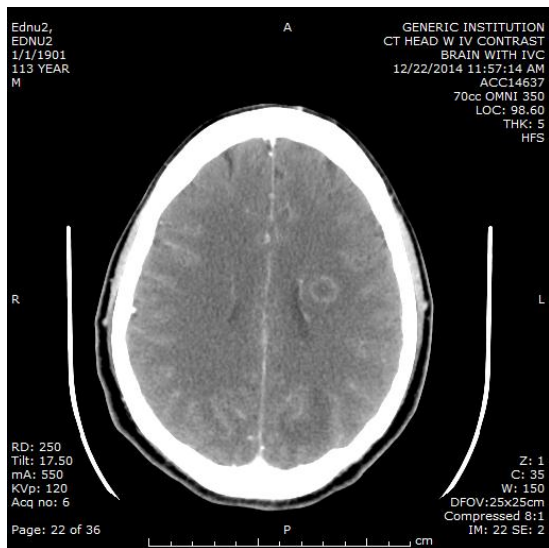
Mass effect is noted related to the vasogenic edema of the above detailed intra-axial masses, however there is no midline shift. The ventricles and sulci are symmetric and normal in size. The basal cisterns are patent. There is no acute intracranial hemorrhage or extra-axial fluid collection.

The visualized orbits, paranasal sinuses, and mastoid air cells are clear. Specifically, there is no evidence of mastoiditis. There is no evidence of venous sinus thrombosis.

**IMPRESSION:**

Three rim-enhancing masses measuring up to 2.9 cm with associated vasogenic edema, as detailed above. These lesions are concerning for intraparenchymal abscess versus metastatic lesions. MRI of the brain is recommended for further characterization.

Series 2 Images 22,20,13



E102198511

**MRI OF THE BRAIN WITH AND WITHOUT INTRAVENOUS CONTRAST**

History: Fever, headache, evaluate for intracranial abnormality

Comparison: CT scan of the head 12/22/2014

Technique: Multiplanar, multisequence magnetic resonance images of the brain were obtained before and after administration of IV contrast.

**Findings:**

Multifocal ring-enhancing lesions are demonstrated within the left frontal, posterior left temporal, and anterior right temporal lobes. Associated dural thickening is noted adjacent to the right anterior temporal lobe lesion. There is ependymal enhancement involving the left occipital horn adjacent to the left temporal lobe lesion. Minimal hypointensity is noted on the SWI sequence within the left frontal and anterior right temporal lesions, which may represent focal breakdown of the blood-brain barrier and subsequent microhemorrhage. All lesions demonstrate surrounding associated vasogenic edema and restricted diffusion centrally.

The brain demonstrates expected volume for age. There is no significant midline shift or hydrocephalus. Expected vascular flow voids are patent. The ventricular system is stable in size. The basal cisterns are patent. The paranasal sinuses and mastoid air cells are well aerated. Orbital contents are unremarkable.

**Impression:**

Three prominent peripherally enhancing lesions within the frontal and temporal lobes as described above. Findings are concerning for abscess. There is ependymal enhancement involving the left occipital horn concerning for ventriculitis.

Series 3; images 43,48,53

Series 11; images 90,110, 137

