46-year-old man who was initially admitted to hospital for new-onset seizures.

Erica Shen, MD PhD
Ketan Bulsara, MD MBA
Abner Gershon, MD
Leo Wolansky, MD
CT with IV contrast

Sagittal

Coronal
CT with IV contrast, Axial
T1 Sagittal
Gd-T1 Axial
T2 FLAIR
Giant Aneurysm
CT with IV contrast:
Isodense, well-defined extra-axial mass with focal density, likely to represent a giant aneurysm of the right middle cerebral artery (M1 segment). Majority of the aneurysm is thrombosed and calcifications are present within and on the margin of the aneurysm.
CT with IV contrast:
Extra-axial mass with focal density, likely to represent a giant aneurysm of the right middle cerebral artery (M1 segment).
MRI sagittal:
Giant fusiform aneurysm of the right middle cerebral artery. Majority of the aneurysm is thrombosed and calcifications are present within and on the margin of the aneurysm.
Gd-T1 Axial:
Large, oval, lobulated mass consistent with calcified right MCA aneurysm.
T2 Axial:
Giant fusiform aneurysm of the right middle cerebral artery. Majority of the aneurysm is thrombosed and calcifications are present within and on the margin of the aneurysm.
Giant Aneurysm

• > 25mm in greatest dimension.

• Clinical Presentation:
  ✓ Headaches
  ✓ Stroke
  ✓ Seizures
  ✓ Cranial nerve palsy
  ✓ TIA or stroke

• Compressed adjacent intra-parenchymal structures usually correlate with patients’ presenting symptoms and neurological deficits.

Giant Fusiform Aneurysm

- Associated causes:
  - Connective tissue diseases.
  - Disturbed cerebral circulation.
  - Inflammation, smoking, and alcohol.
  - A positive family history.

- Bleeding from fusiform aneurysms occurs in less frequency as compared to intracranial hemorrhage caused by saccular aneurysms.

- Characteristic features of a giant aneurysm:
  - Presence of mural thrombus.
  - Episodes of intracranial hemorrhage.
  - Symptoms of expansion.

• https://radiopaedia.org