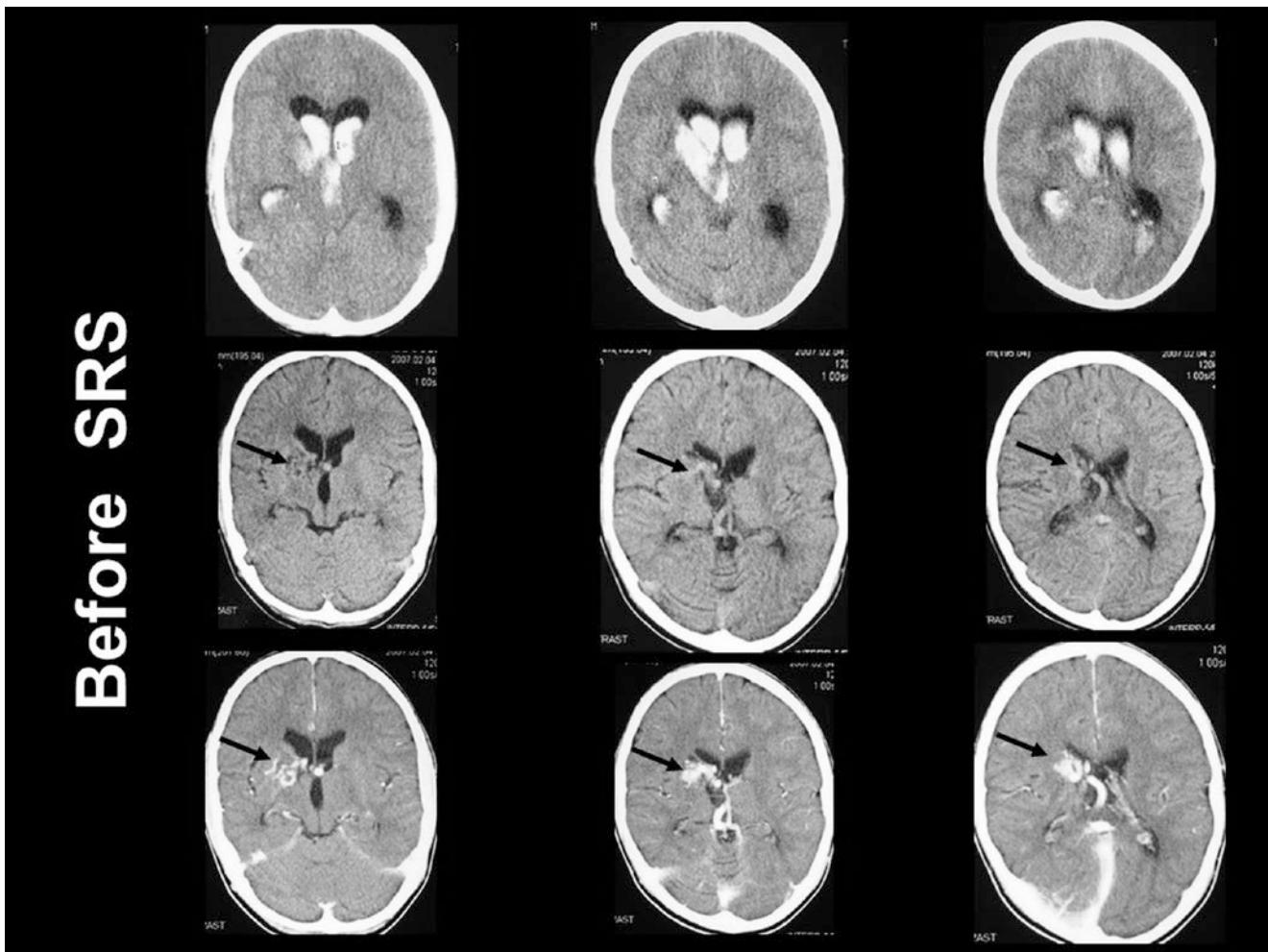
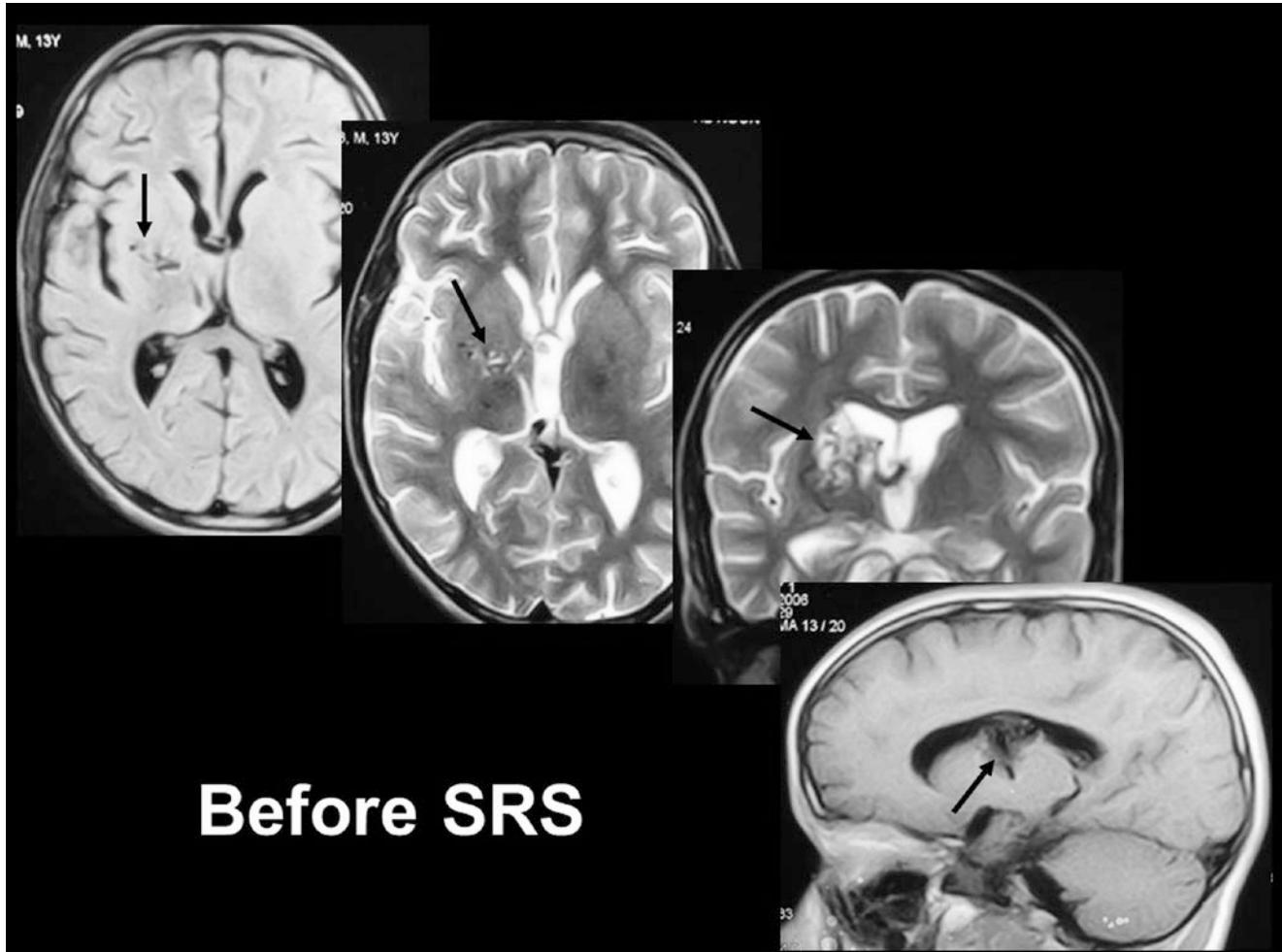


## Basal Ganglia Arteriovenous Malformation (AVM)

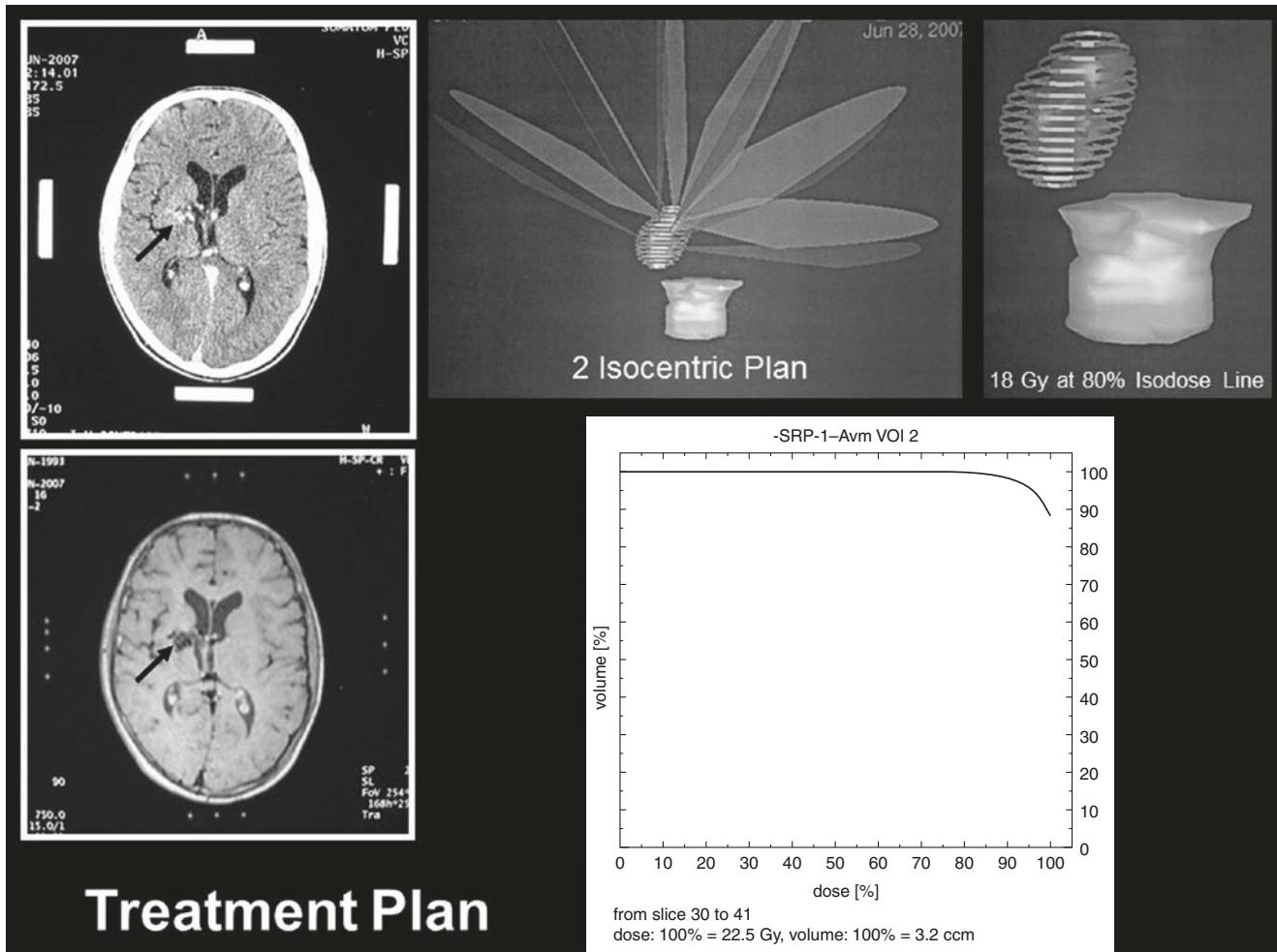
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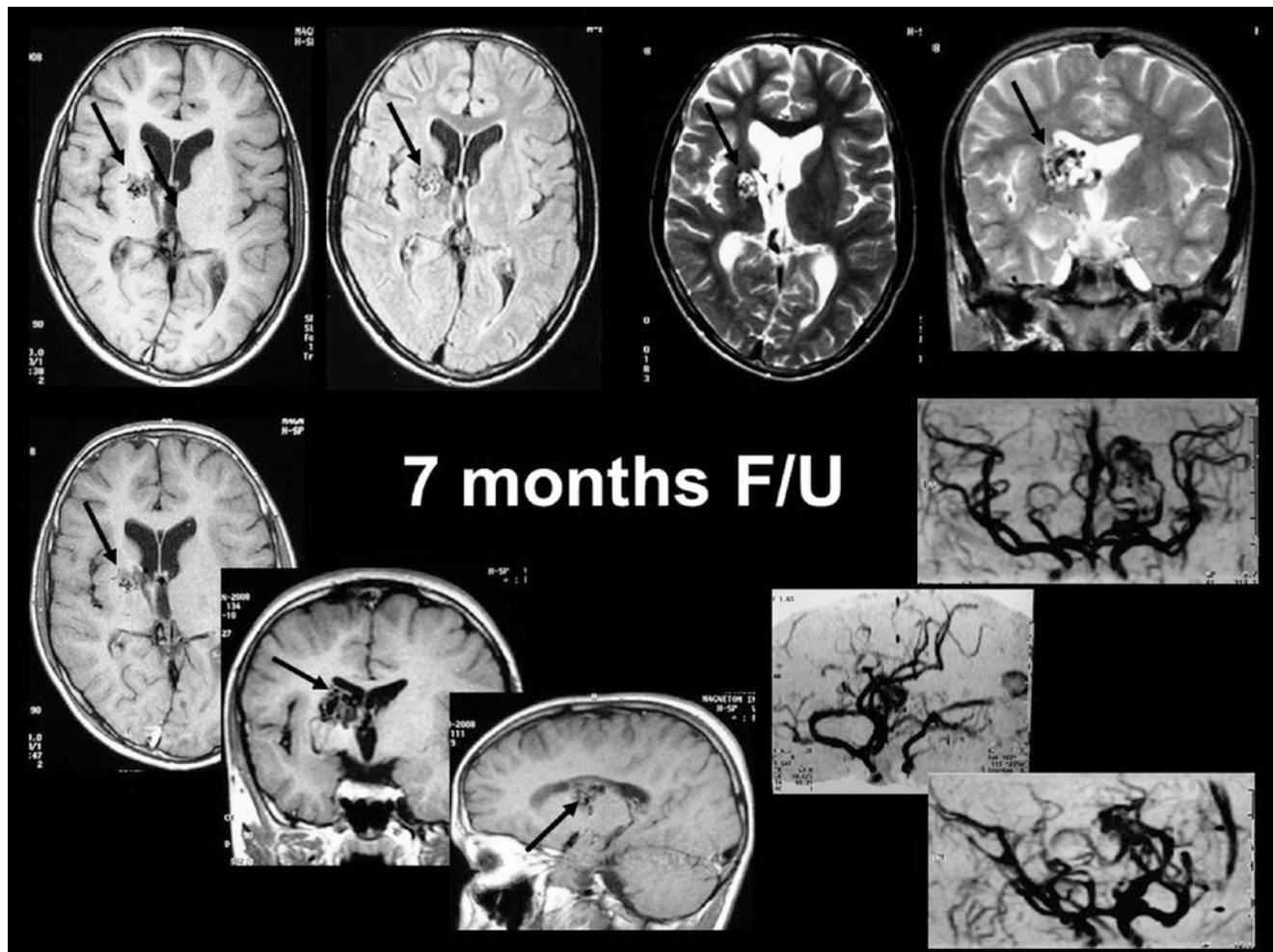
- **Demographics:** Male; 14 years
- **Initial Presentation:** Hemorrhage (intraventricular), which occurred twice; at 2 years and 8 months before radiosurgery treatment
- **Diagnosis:** Basal ganglia AVM
- **Pre-radiosurgery Treatment:** None
- **Pre-radiosurgery Presentation:** Asymptomatic and neurologically intact, after complete recovery from coma induced by last hemorrhage
- **Radiosurgery Treatment:**
  - Upfront (primary); Linac-based SRS for right basal ganglia (lentiform nucleus) AVM
- **Radiosurgery Dosimetry:**
  - Target volume: 3.2 cc
  - Marginal dose: 18.0 Gy
  - Marginal isodose: 80%
  - Maximum dose: 39.8 Gy
  - Minimum dose: 14.2 Gy
  - Average dose: 26.7 Gy
  - Number of isocenters: 2
  - Maximum dose to brain stem: 6.7 Gy
- **Follow-Up Period:** 65 months post-SRS
- **Clinical Outcome:** Asymptomatic and neurologically intact throughout the entire follow-up period
- **Complications:** None
- **Radiological Outcome:**
  - 7 months post-SRS (MRI and MRA): Stationary size of AVM nidus
  - 14 months post-SRS (MRI):
    - Marked decrease in size of AVM nidus
    - Appearance of right periventricular perinidal high signal in T2 and FLAIR studies, denoting vasogenic edema
  - 25 months post-SRS (MRI):
    - Non-visualized AVM nidus
    - Resolving right periventricular perinidal high signal in T2 and FLAIR studies
    - Appearance of right periventricular focal encephalomalacia, showing minimal enhancement in T1 Gadolinium-enhanced study, at the site of prior AVM nidus
  - 65 months post-SRS (CTA): Complete obliteration of AVM nidus
- **Post-radiosurgery Treatment:** None

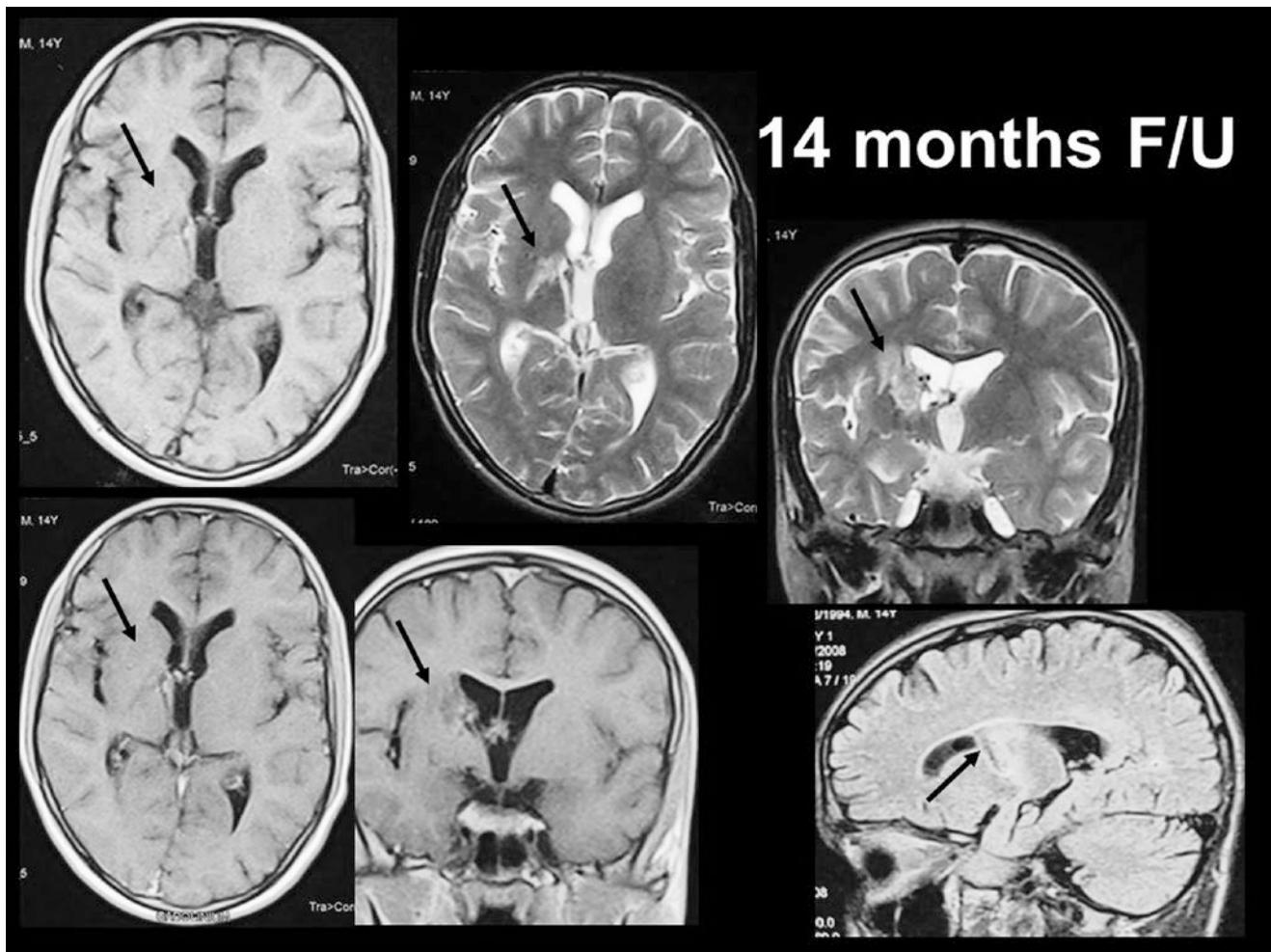
**Before SRS**

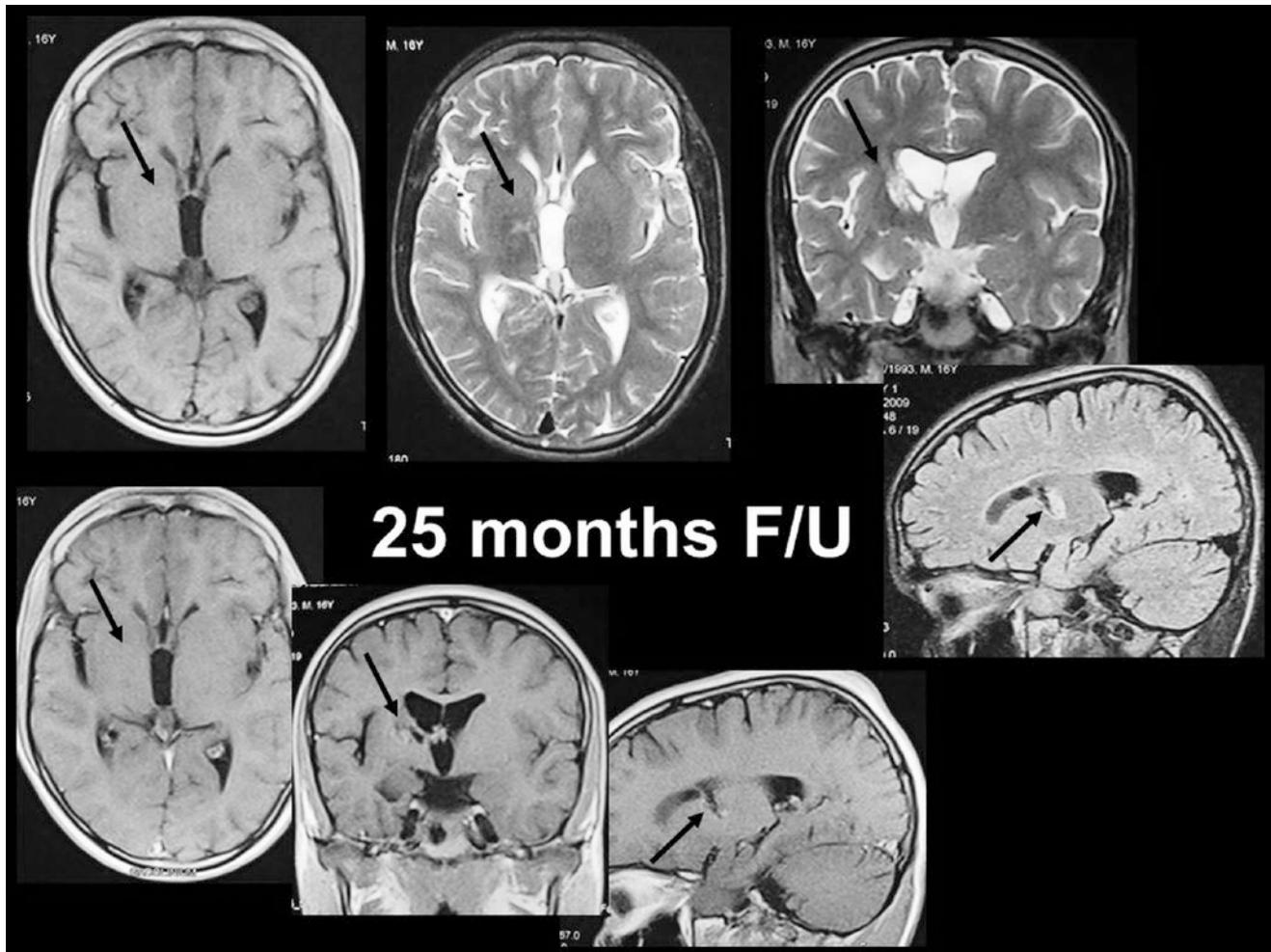


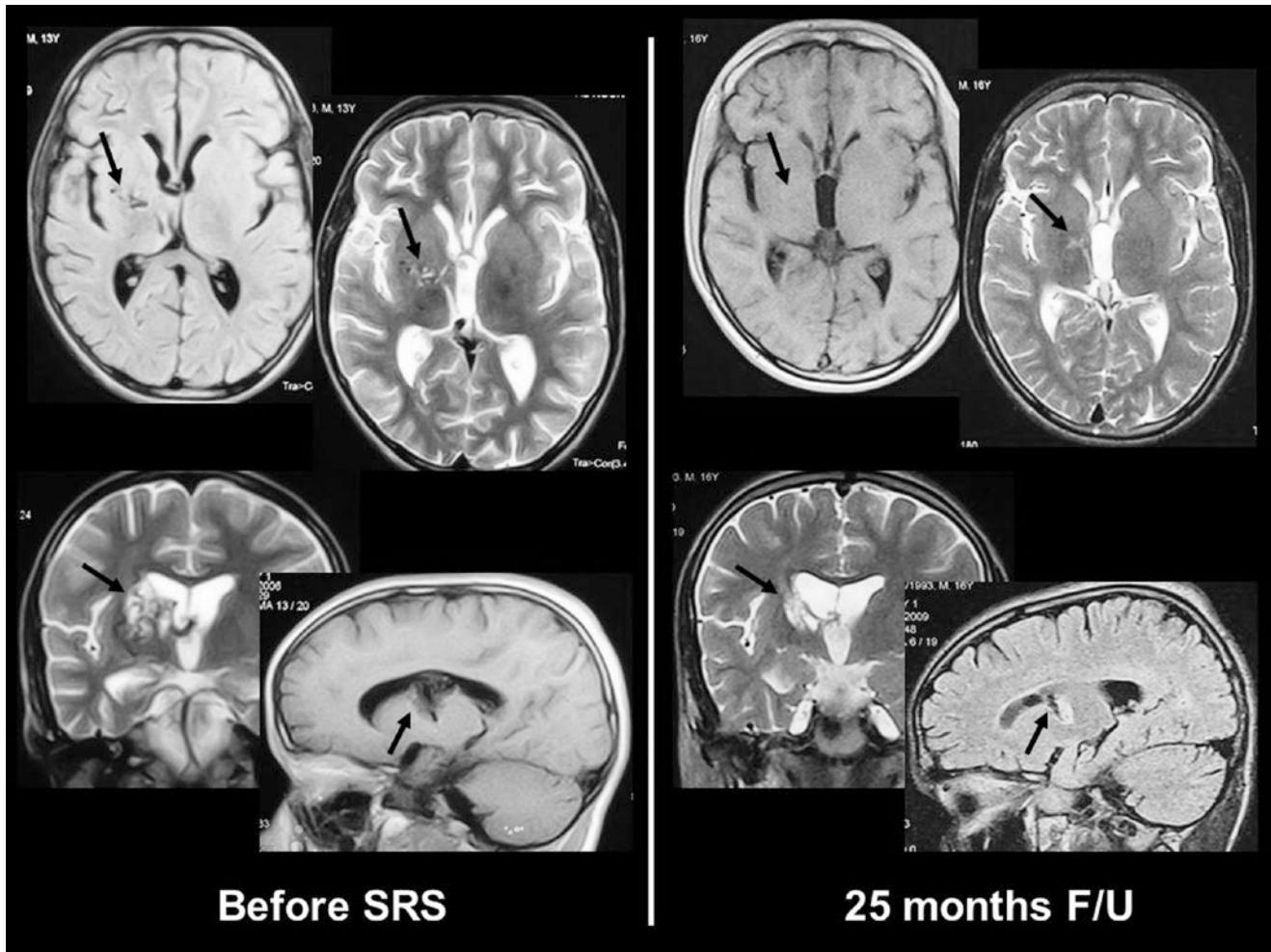


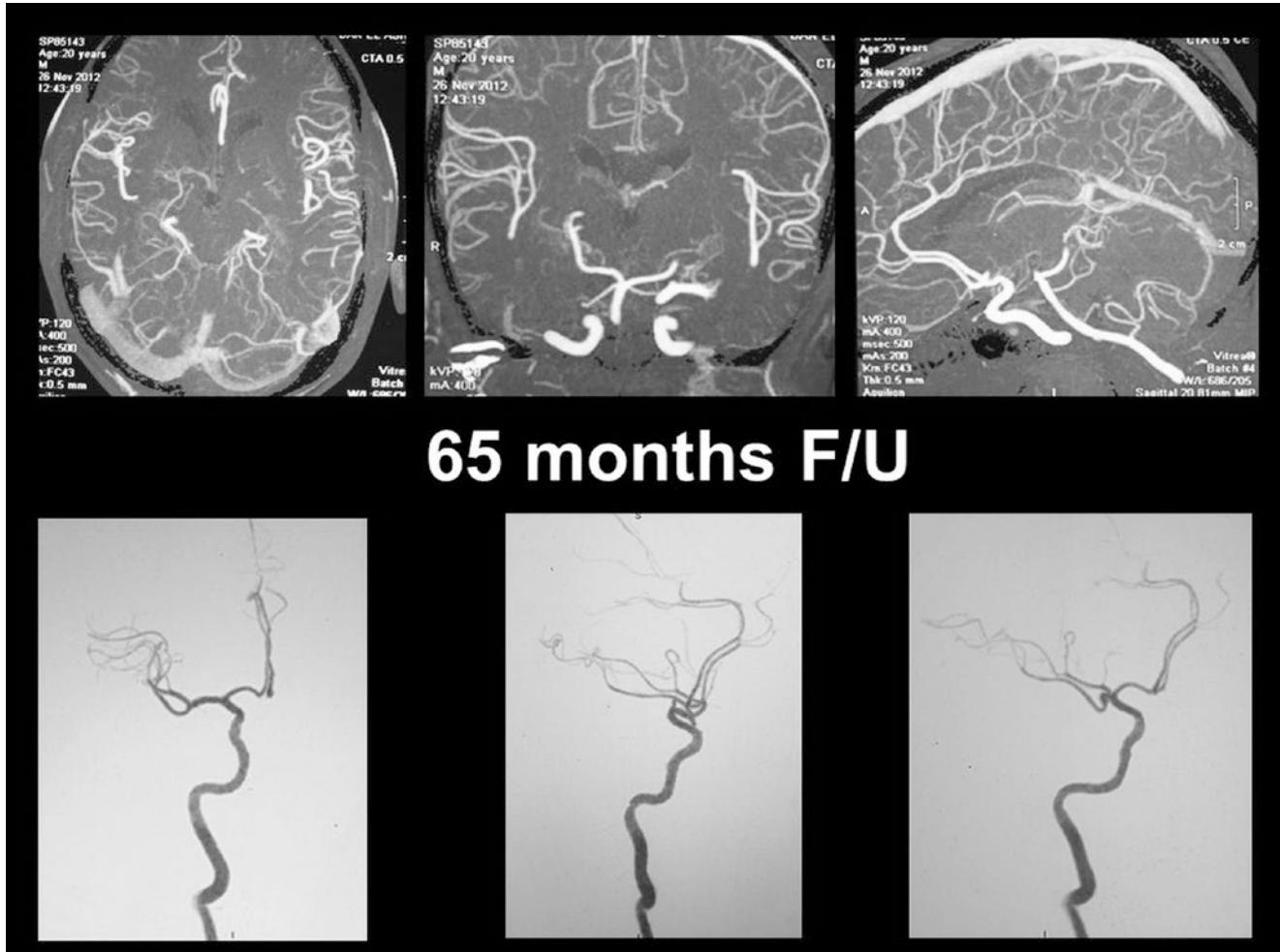


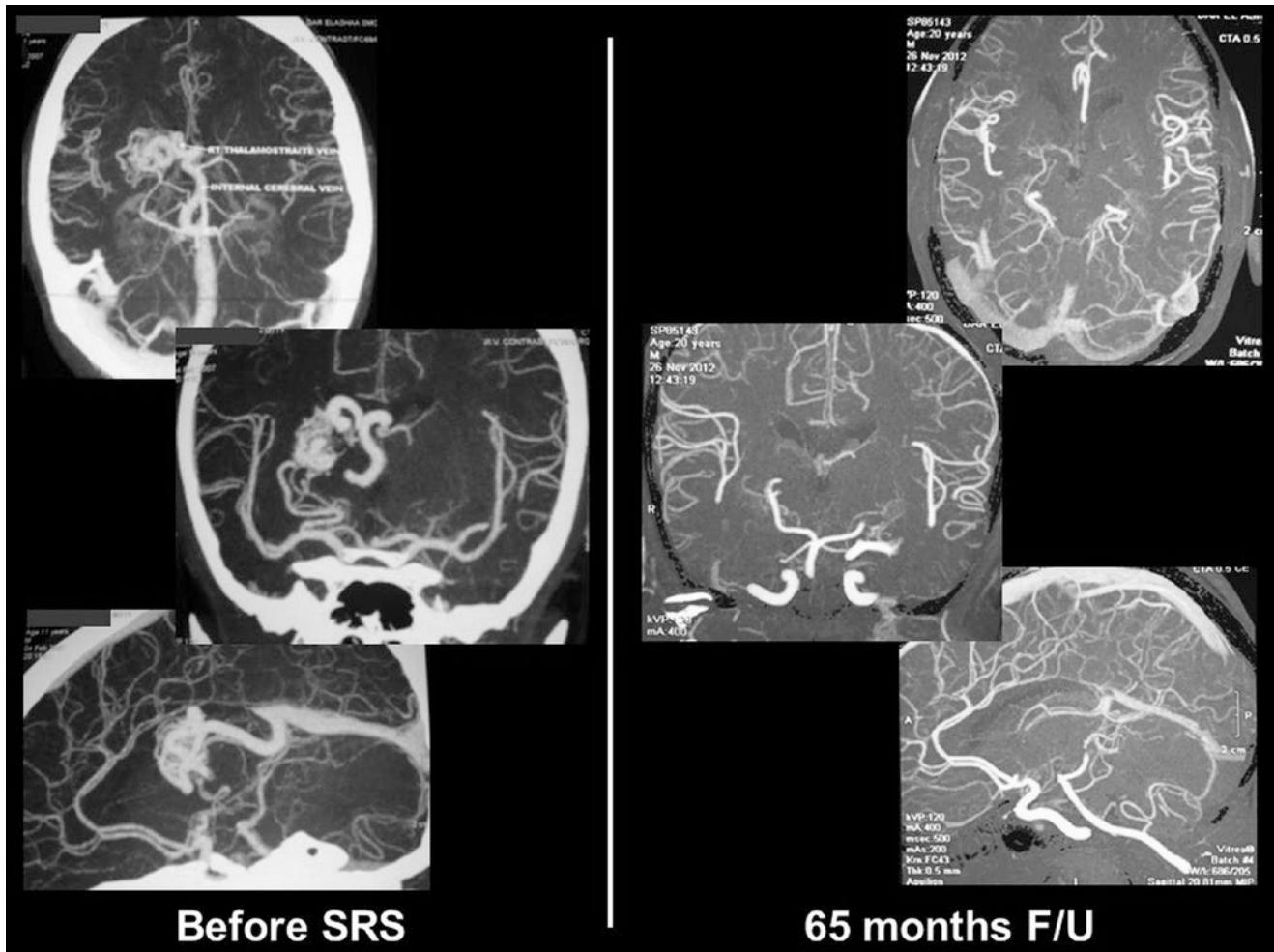












## Further Reading

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