

Left Ventricular Pseudoaneurysm in an Adult with a Repaired Incomplete Atrioventricular Canal

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Background

- Pseudoaneurysms are a rare, but severe consequence of myocardial infarction
- Surgery is the preferred treatment modality to lower the risk of rupture

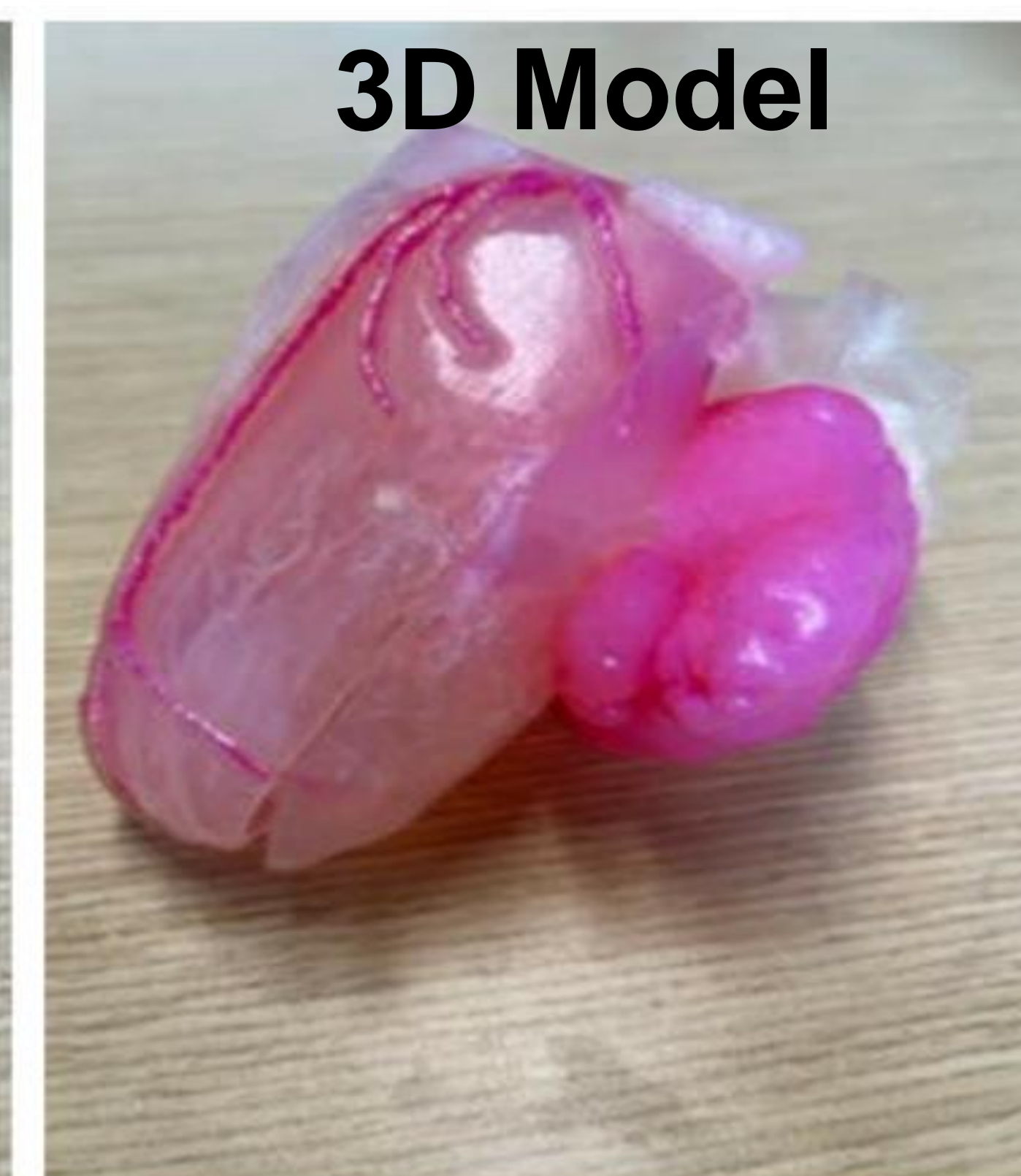
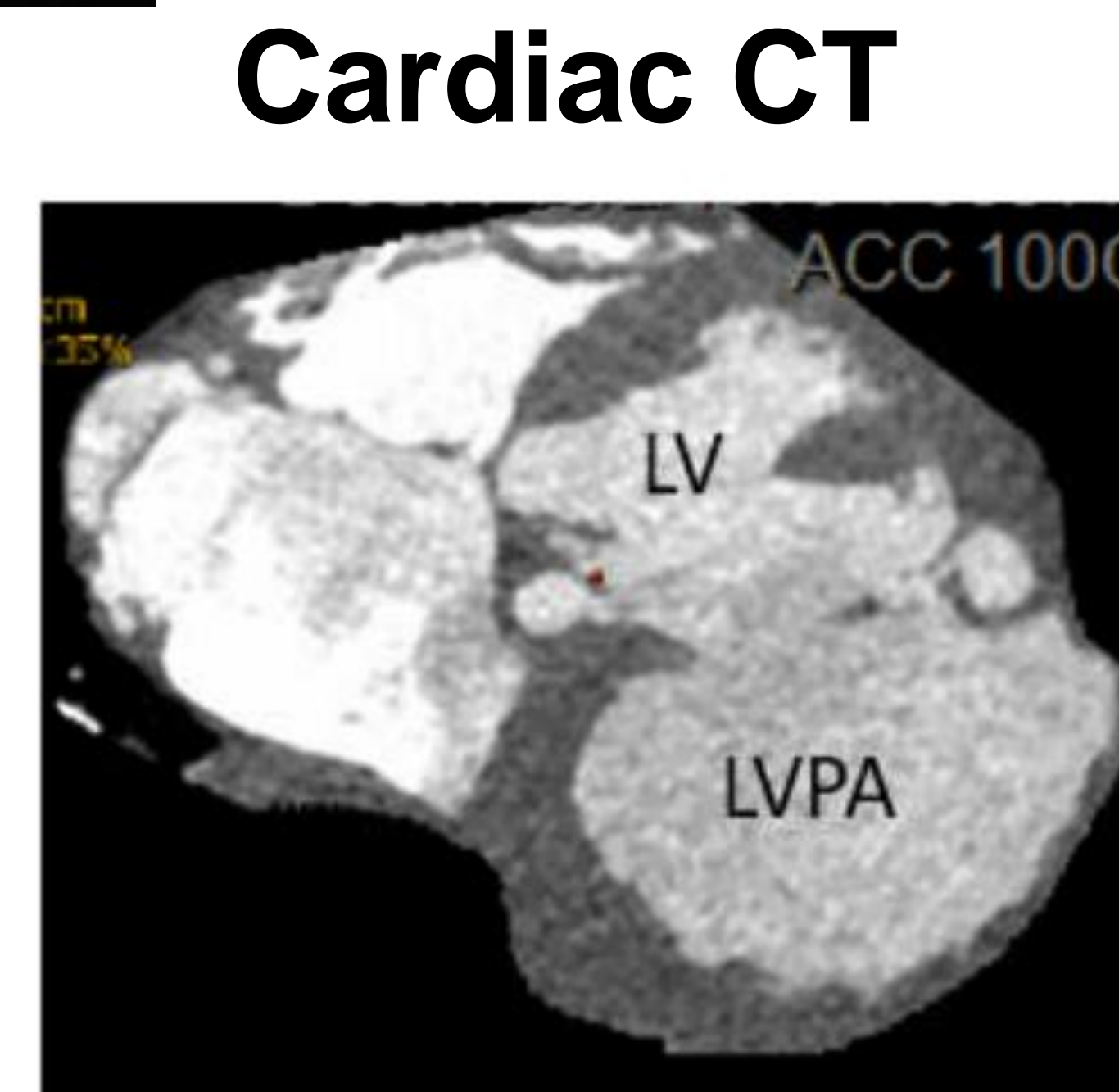
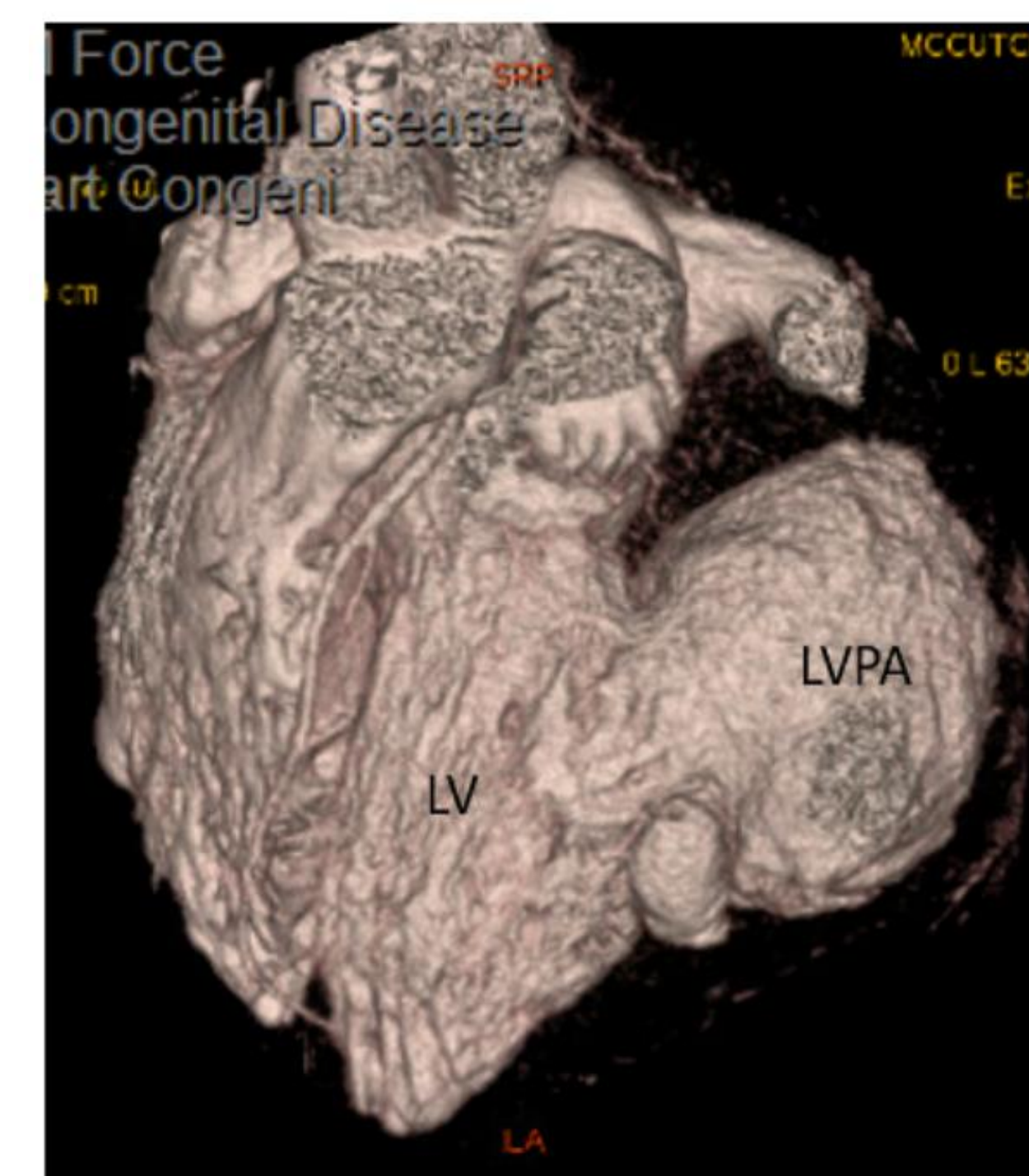
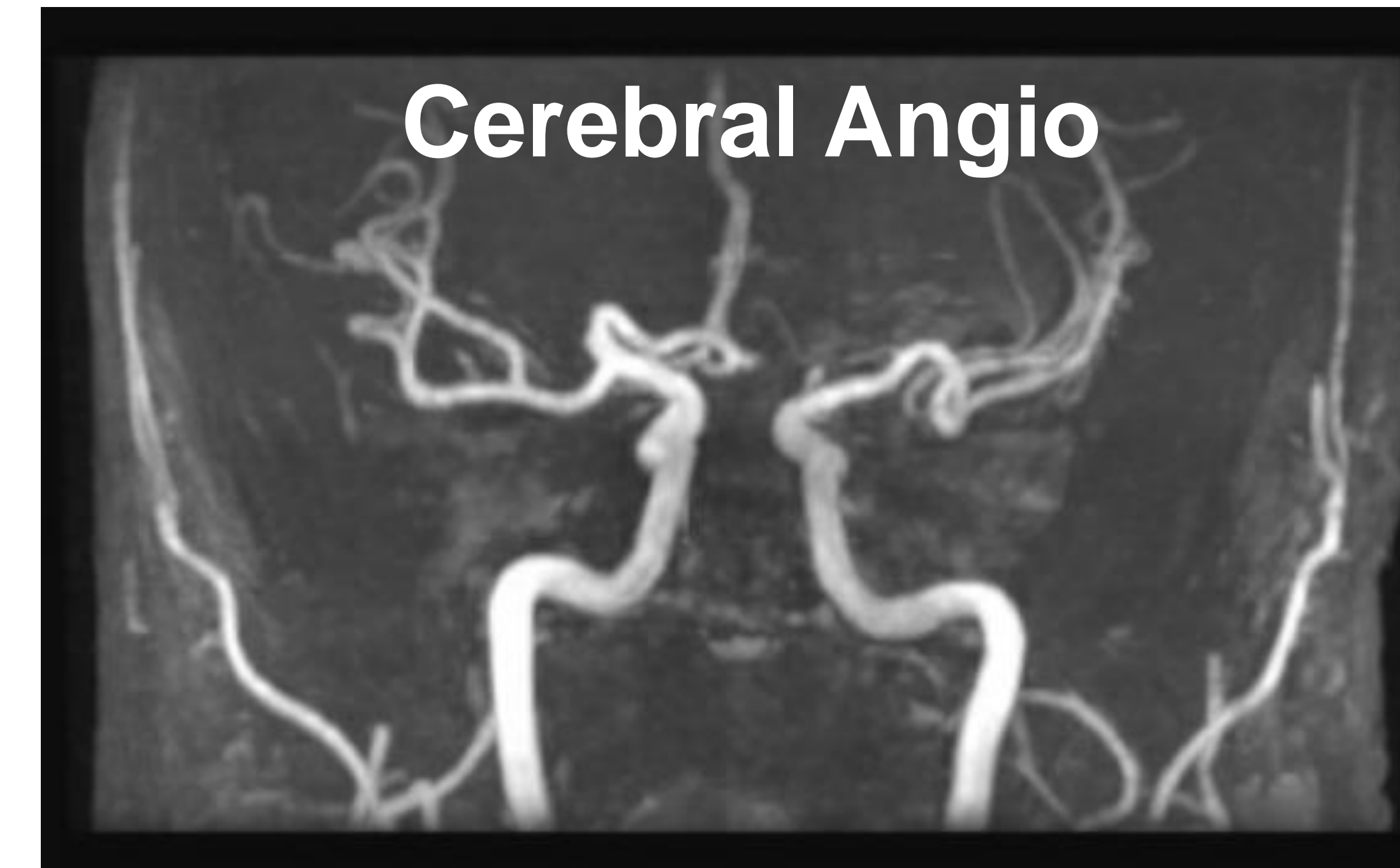
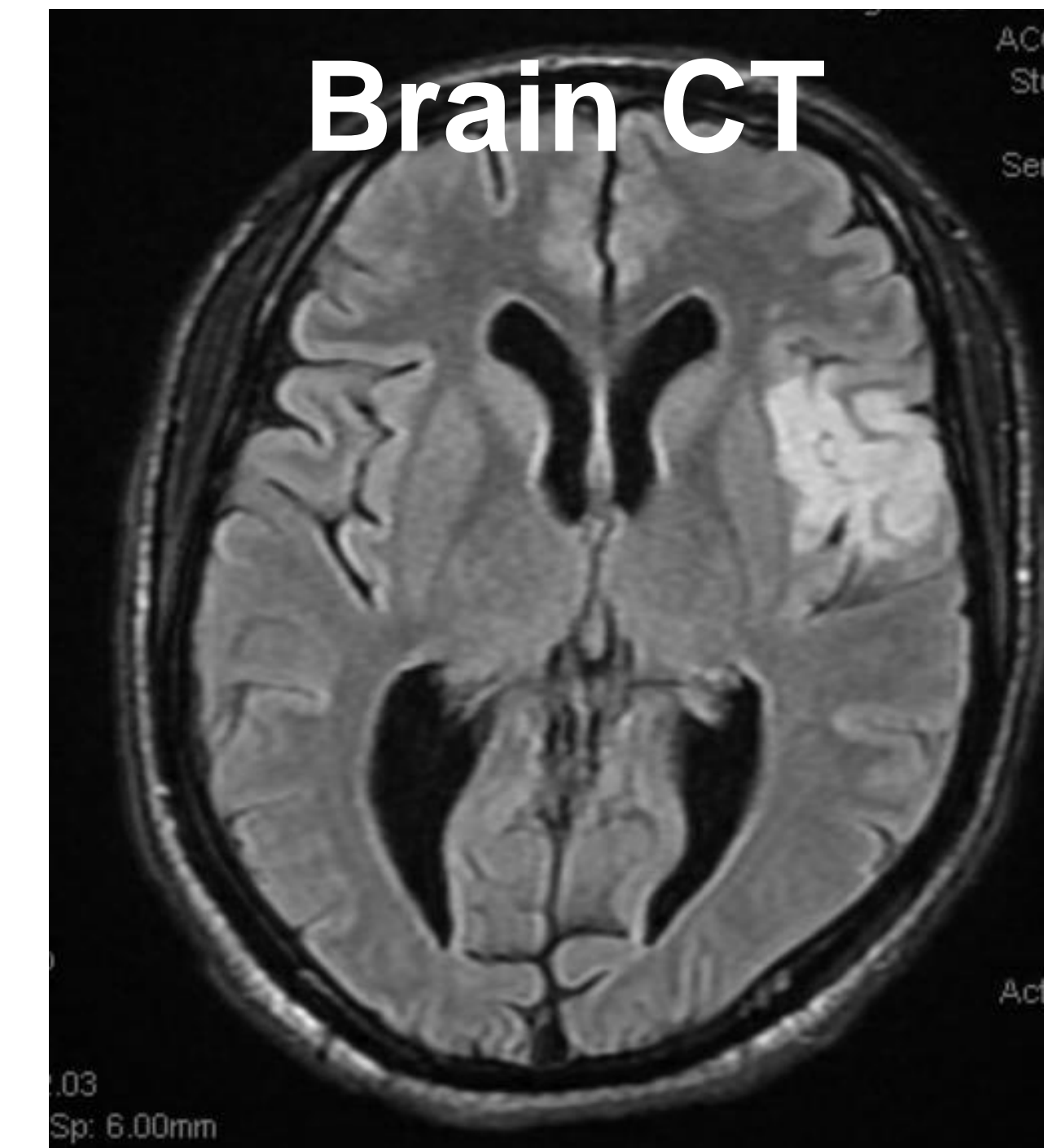
HPI

- 39-year-old male with trisomy 21 presenting with the sudden onset of right sided weakness in the upper and lower extremities, aphasia, and facial droop
- History of an incomplete atrioventricular canal (AVC) defect repaired with patch closure of the primum ASD and suture closure of the cleft in the AV valve at 26 years old
- Head CT with a main cerebral artery (MCA) thrombus
- Echocardiogram and cardiac CT revealed a large pseudoaneurysm (9 x 6cm) involving the lateral left ventricle with intramural thrombus and a small proximal left circumflex artery that appeared occluded entering the atrioventricular groove
- Suspect he suffered a left circumflex (LCX) injury during the AVC repair and subsequent myocardial infarction

Management

- Cerebral blood flow was restored with thrombectomy followed by alteplase
- Surgical risk was felt to be prohibitive for this patient given the broad base of the defect and risk of recurrent neurologic event
- To lower the risk of recurrent embolic events, he is anticoagulated with Apixaban

Diagnostic Imaging



Follow up

- At 3 year follow-up, the pseudoaneurysm is stable in size and there have been no subsequent neurologic events
- The patient continues on lifelong anticoagulation

Conclusion

- A pseudoaneurysm is an uncommon, but life-threatening complication of myocardial infarction
- Due to the risk of rupture, surgical resection is preferred, but not all patients are surgical candidates
- Rarely, defects can be addressed with percutaneous device closure
- There is limited data on management with long-term anticoagulation
- At 3 year follow up, our patient has a stable echocardiogram with no additional neurologic events
- When surgery is considered too risky, anticoagulation may be an appropriate alternative

Contact Info

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