

Cases for Discussion

*WLNC Los Angeles
May 15-17, 2017*

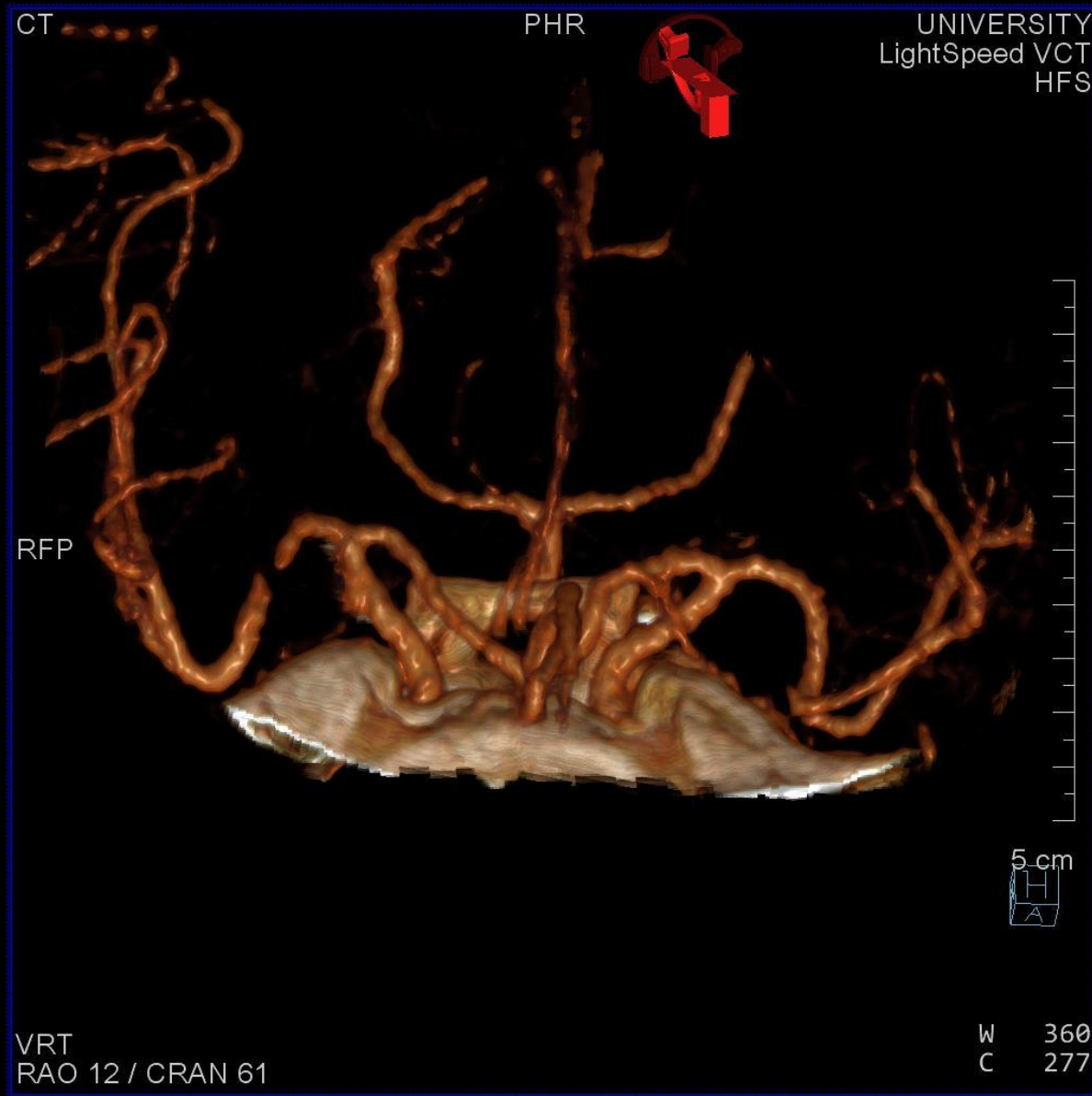
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Disclosures

- Consultant for Medtronic, Microvention, Johnson and Johnson, Penumbra, Siemens, Stryker
- Research support from Penumbra, Sequent and Siemens
- Stockholder for Bendit, Cerebrotech, Serenity, Synchron

Case #1

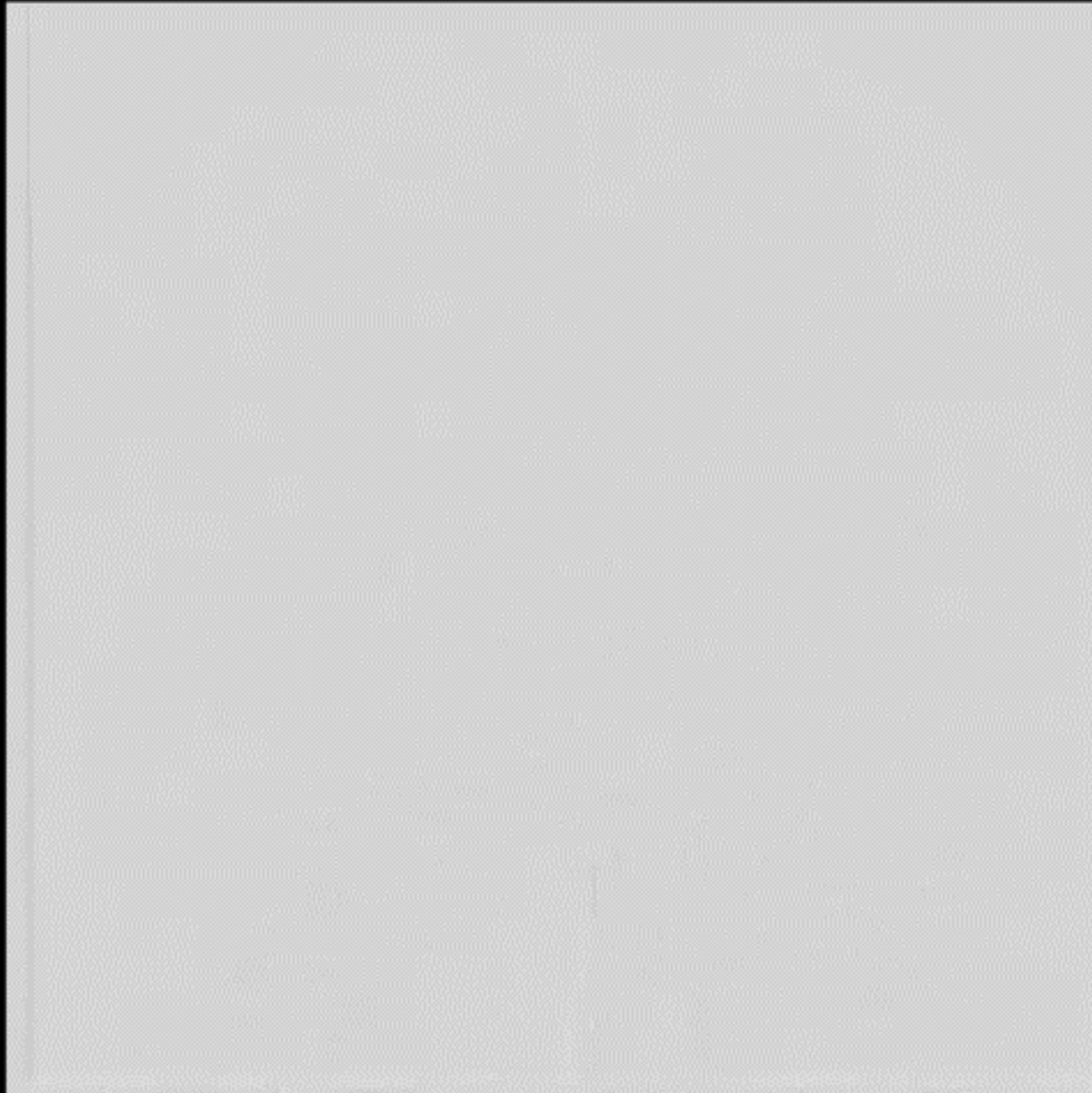
- A 31 year old male presents with sudden left-sided weakness 2.5 hours ago. Past medical history is significant for polysubstance abuse and multiple emergency department encounters. The outside hospital emergency department reports NIHSS 4.
- The noncontrast CT head is normal and CTA is reported as showing filling defects in supraclinoid RICA and RMCA.
- TPA is administered and the helicopter stroke transfer team reports the patient is NIHSS 10.



On arrival to neuroangio lab the patient is NIHSS 1 for very mild pronator drift. This image is the outside hospital CTA reconstructed on angio workstation.



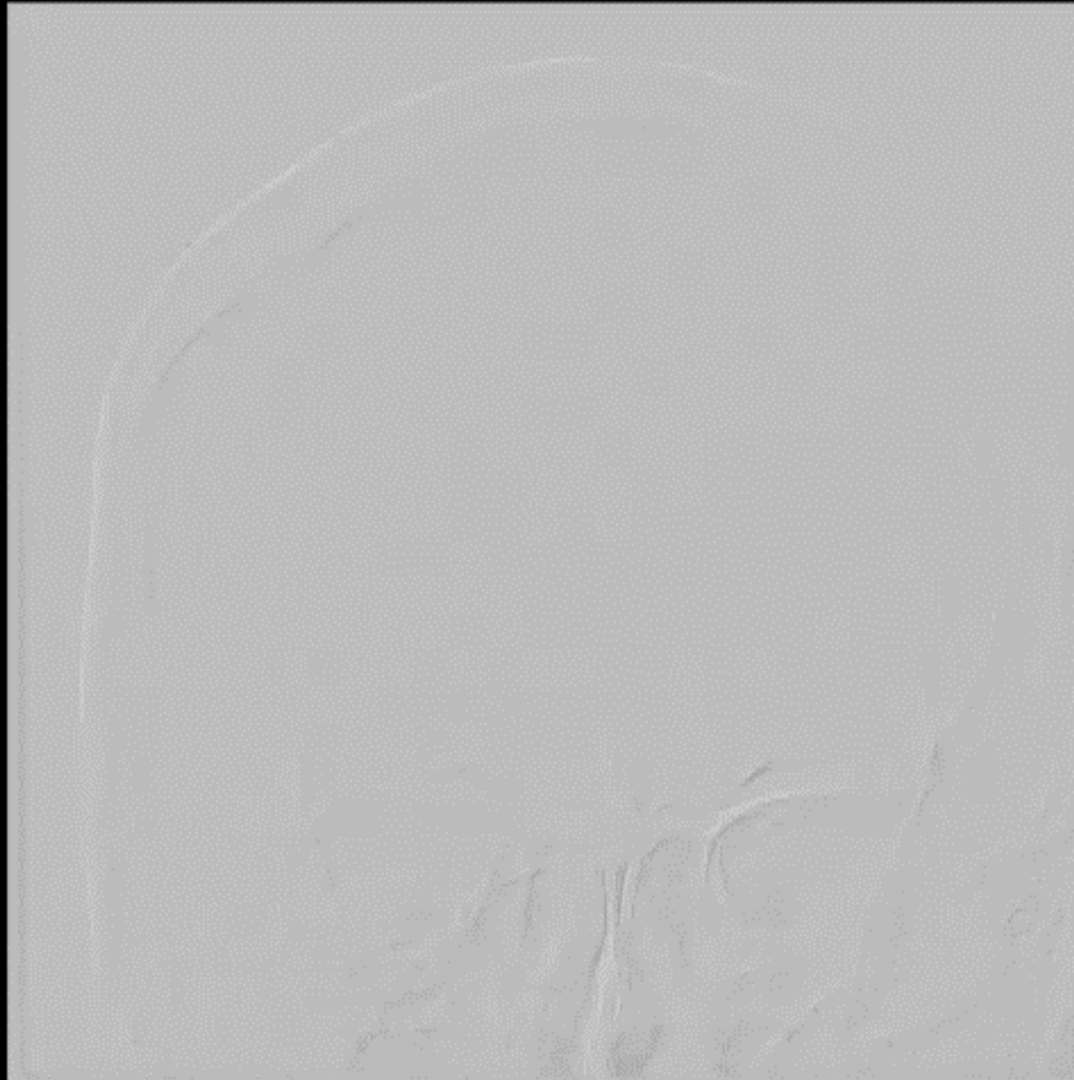
Access seems reasonable.



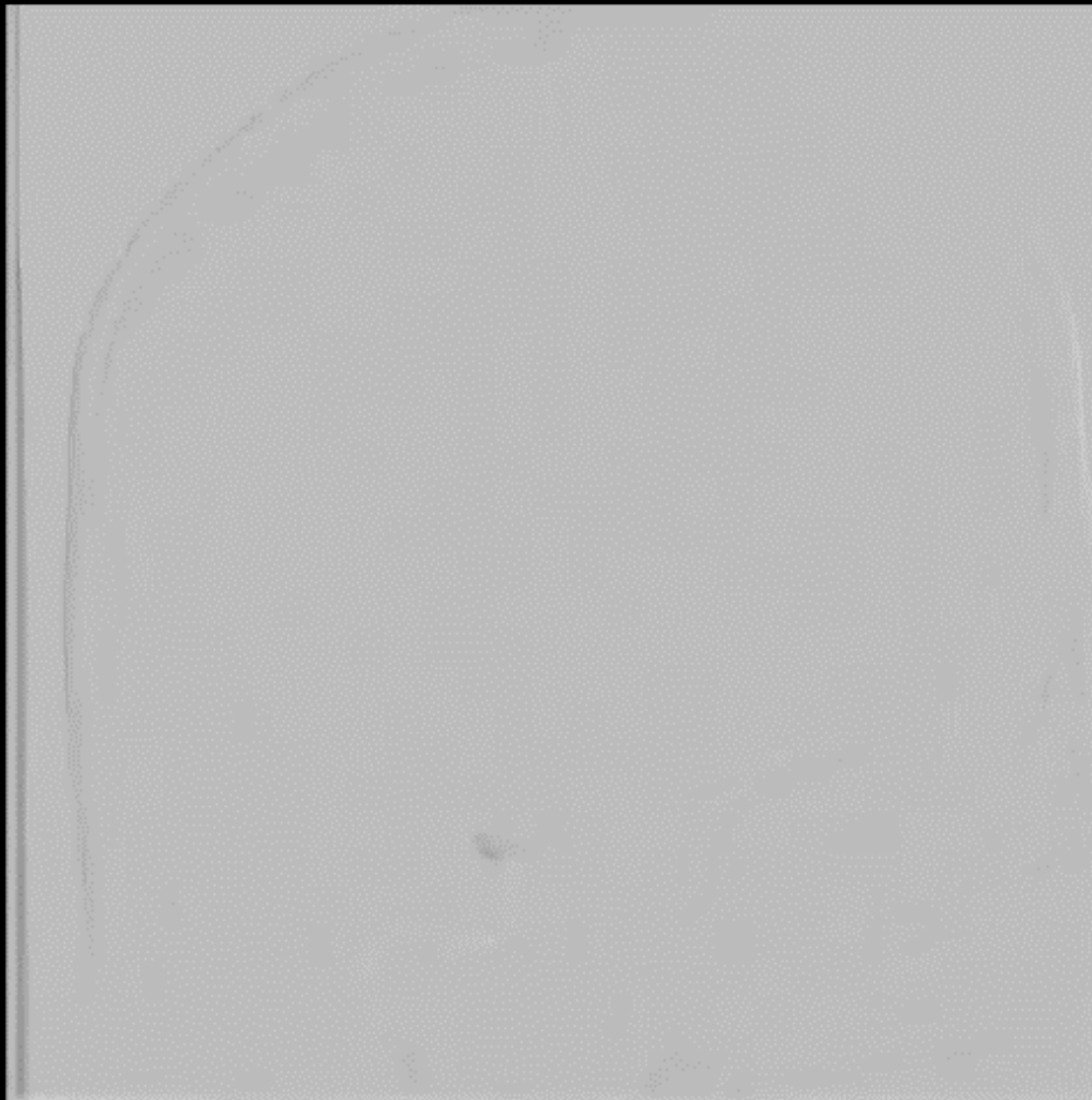
DSA shows non-occlusive free-floating thrombus in M1. Distal branch filling is good.

Poll: The Best Course of Action Is?

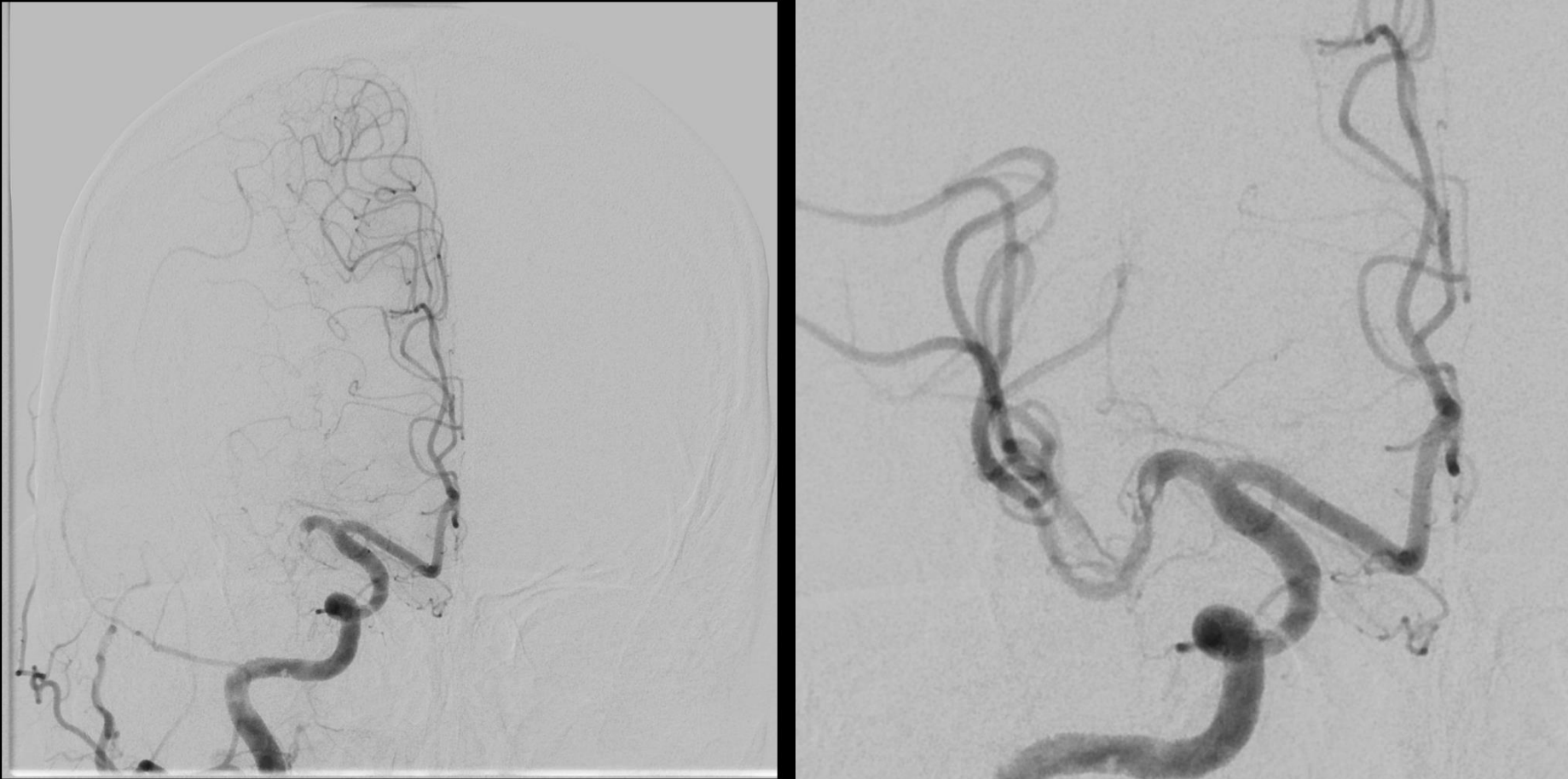
1. Admit to ICU on heparin drip
2. Administer IV antiplatelet drugs
3. Administer IA antiplatelet drugs
4. Aspiration thrombectomy
5. Stent-trieter thrombectomy



After team discussion, aspiration thrombectomy is chosen, using balloon guide and “no-touch” technique. DSA shows significant worsening of thrombus, filling defect and distal perfusion. The patient is now densely hemiplegic.

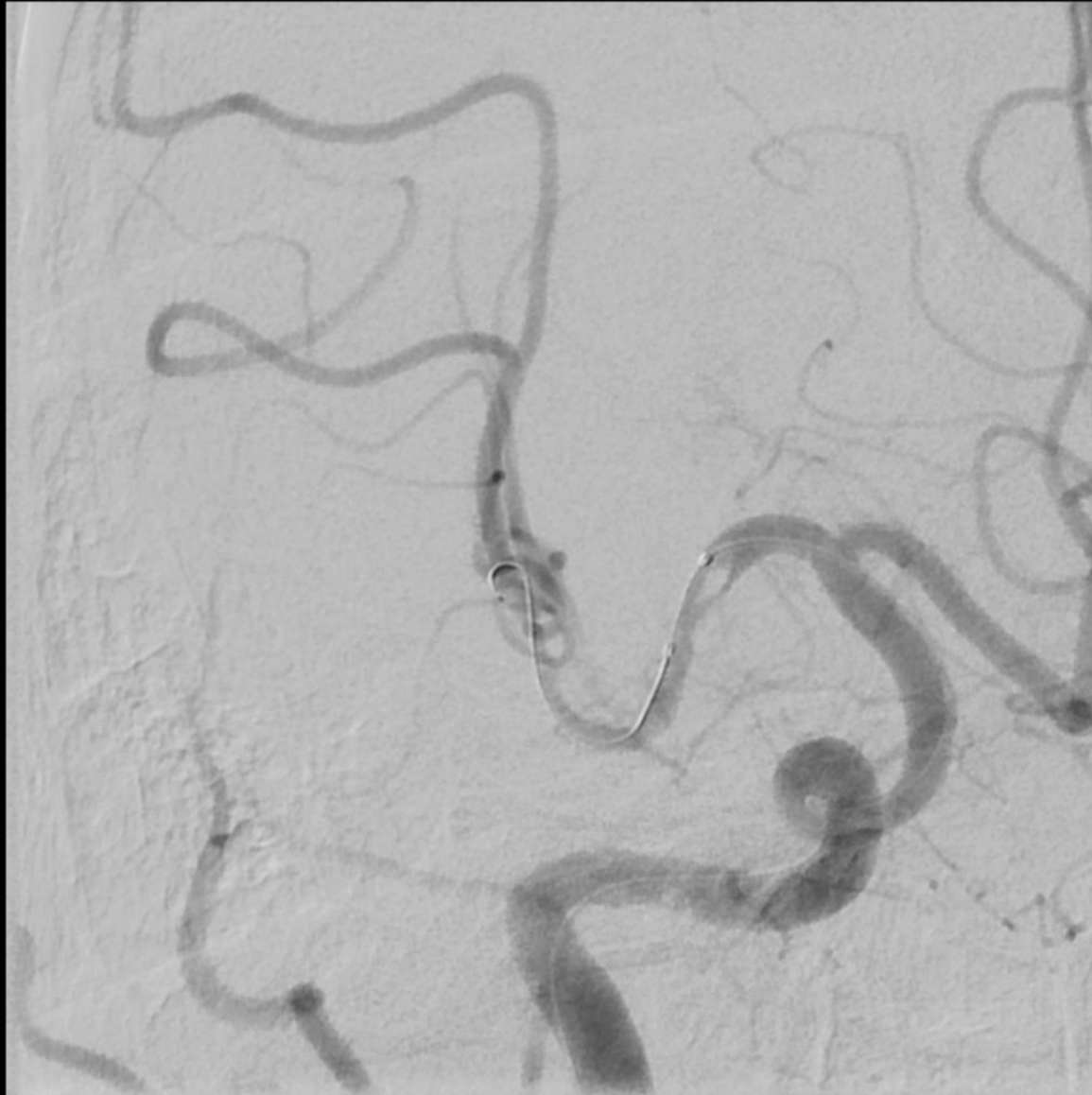


Multiple passes are taken, first using ADAPT technique, then using stent-aspiration technique. Thrombus is seen in aspiration tubing and on stent, but distal filling remains poor.

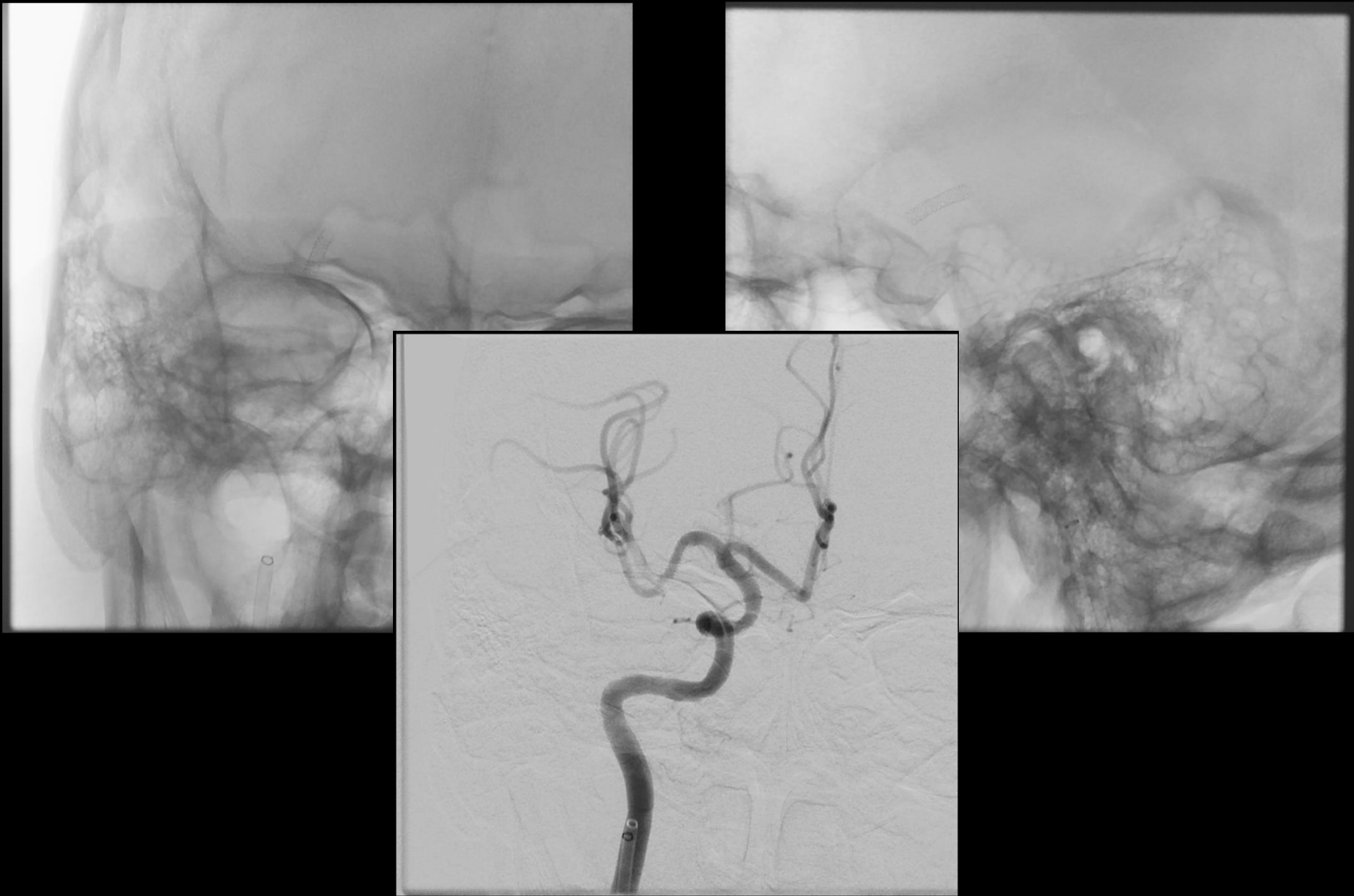


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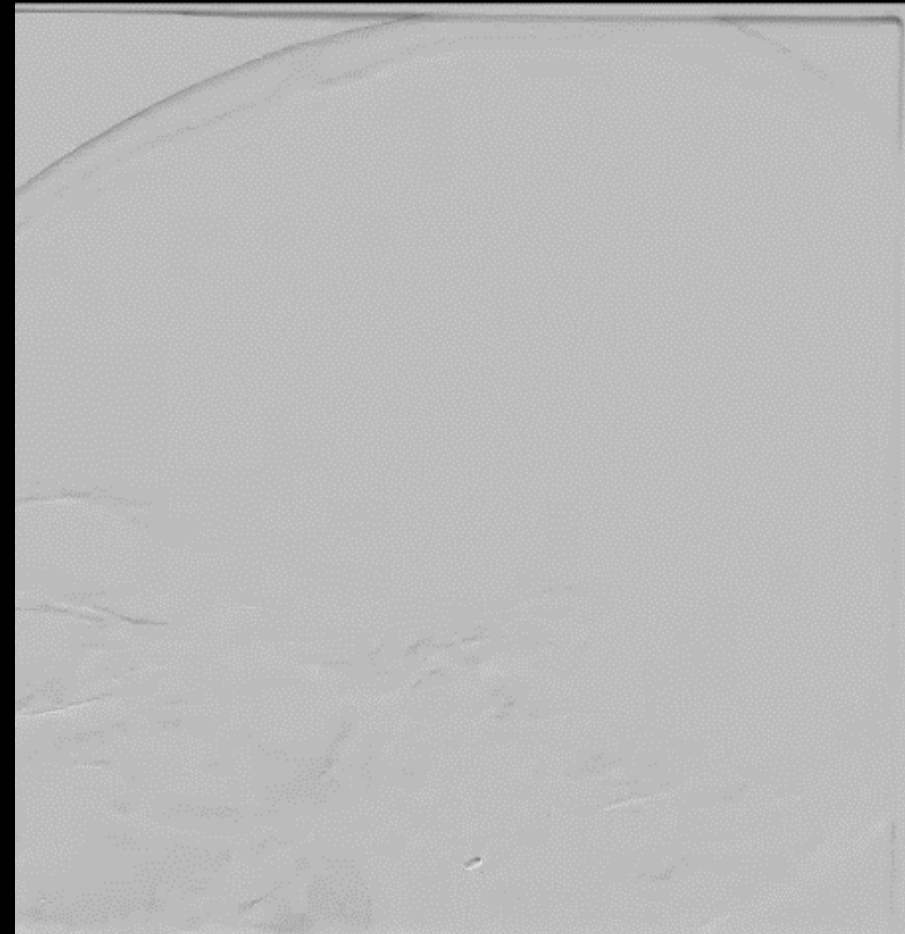
Discussion:
What would you do?



The patient is heparinized to an ACT of 245. Angioplasty using 2.5x12 coronary balloon fails to improve distal perfusion.



The patient is loaded with ½ loading dose of abciximab and started on the drip. A 2.5x12mm coronary stent is placed.



The patient is still hemiplegic. There is some thrombus seen in the proximal M2s but filling seems much better.



The patient is admitted to the ICU and his hemiplegia gradually improves over the next six hours on abciximab drip and he is loaded with clopidogrel.

Lessons:

1. I should have recognized the dissection earlier.
2. I was very lucky that I did not cause a devastating SAH with repeated attempts at thrombectomy.
3. I believe the best treatment would have been heparinization and close monitoring in the ICU.
4. Our stroke team is adamantly against giving heparin or antiplatelet drugs to patients who have received TPA but I sometimes believe this may be the best treatment. Have others encountered this issue?

“The definition of insanity is doing the same thing over and over again, but expecting different results.” –Einstein