

My Worst Carotid Complication

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Disclosure

Speaker name: Ehrin J. Armstrong MD

I have the following potential conflicts of interest to report:

Consulting: Abbott Vascular, Boston Scientific, Cardiovascular Systems, Medtronic, Philips

Employment in industry

Stockholder of a healthcare company

Owner of a healthcare company

Other(s)

I do not have any potential conflict of interest

History

- 53 woman with recent stroke (left hemispheric) with good functional recovery
- Past Medical History:
 - CAD, recent PCI procedures
 - CHF
 - DM
 - HTN
 - Obesity

History

- She underwent left carotid artery stenting for symptomatic moderate (70%) internal carotid artery stenosis
- Performed uneventfully with a XACT 8-6mm x 40mm stent with NAV-6 distal embolic protection
- Discharged on dual antiplatelet therapy (patient reports compliance)



Before (A) and after (B) initial carotid artery stenting

History

3 days after discharge, she developed aphasia and right-sided weakness. Emergent CT showed no intracranial hemorrhage.

There was, however, evidence of left internal carotid artery (ICA) thrombotic occlusion



CT showing
occluded left
carotid stent

History

- Neurology evaluates patient and reviews CT Angio:
 - Occlusion of left ICA within carotid stent
 - Some flow noted in left MCA and ACA from collaterals
- Neurology recommendation: Observation (no TPA) and no intervention on occluded ICA stent

History

Patient Taken Emergently to Cath Lab



Procedure

- 6 Fr Shuttle Sheath
- Occlusion could not be crossed with Filter or PT Graphix guidewire
- Finally crossed with Miracle Bros 3 gm guidewire
- Dilation with 2.5 mm coronary balloon
- Filter advanced beyond stent into distal ICA

Filter and aspiration



Large amounts
of red
thrombus
removed

7 Fr. Export Catheter

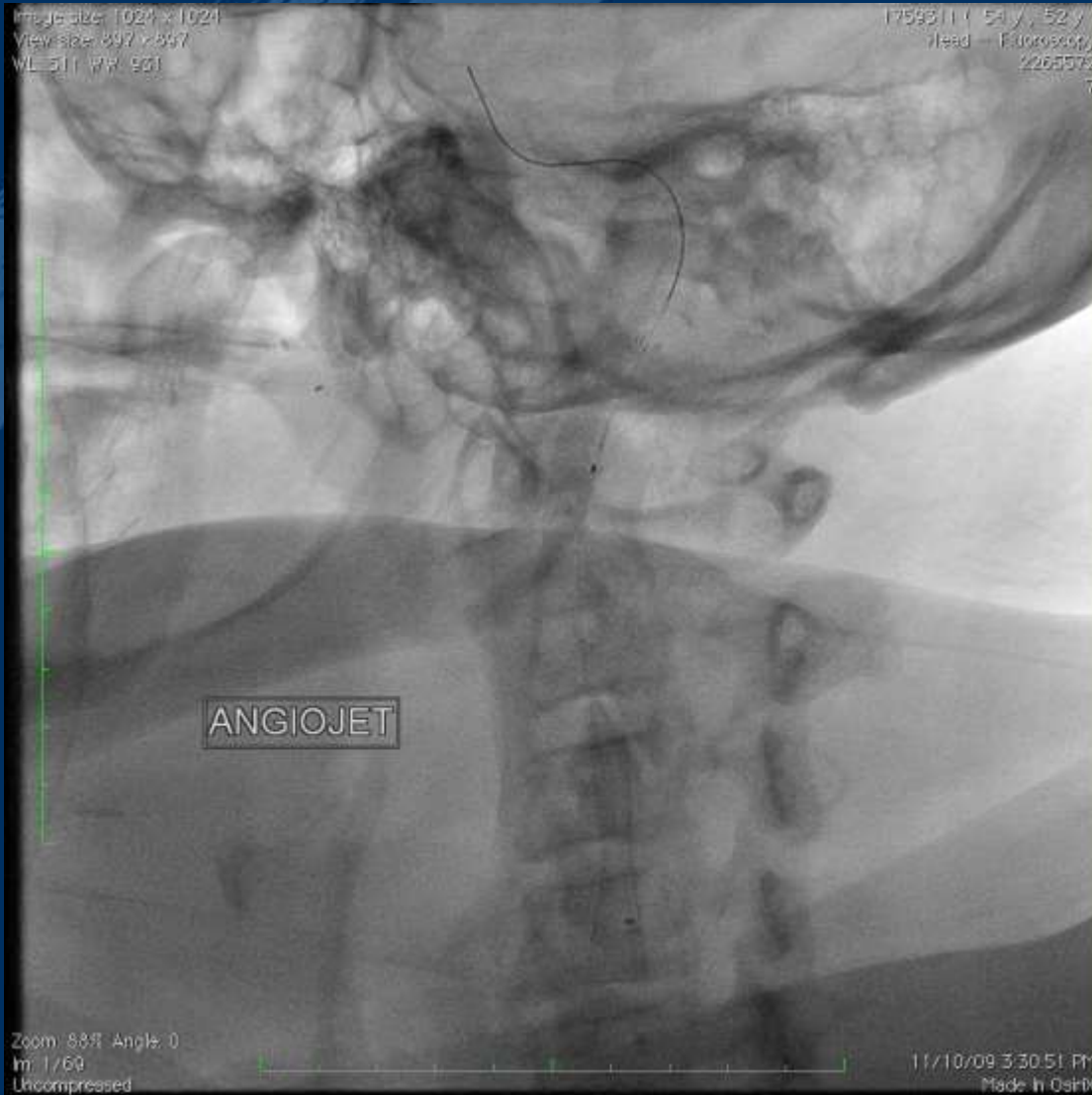
Following Thromboaspiration



History

- Twin Pass catheter advanced into stent
- 6 mg rTPA infused into ICA over 15 – 20 minutes

History



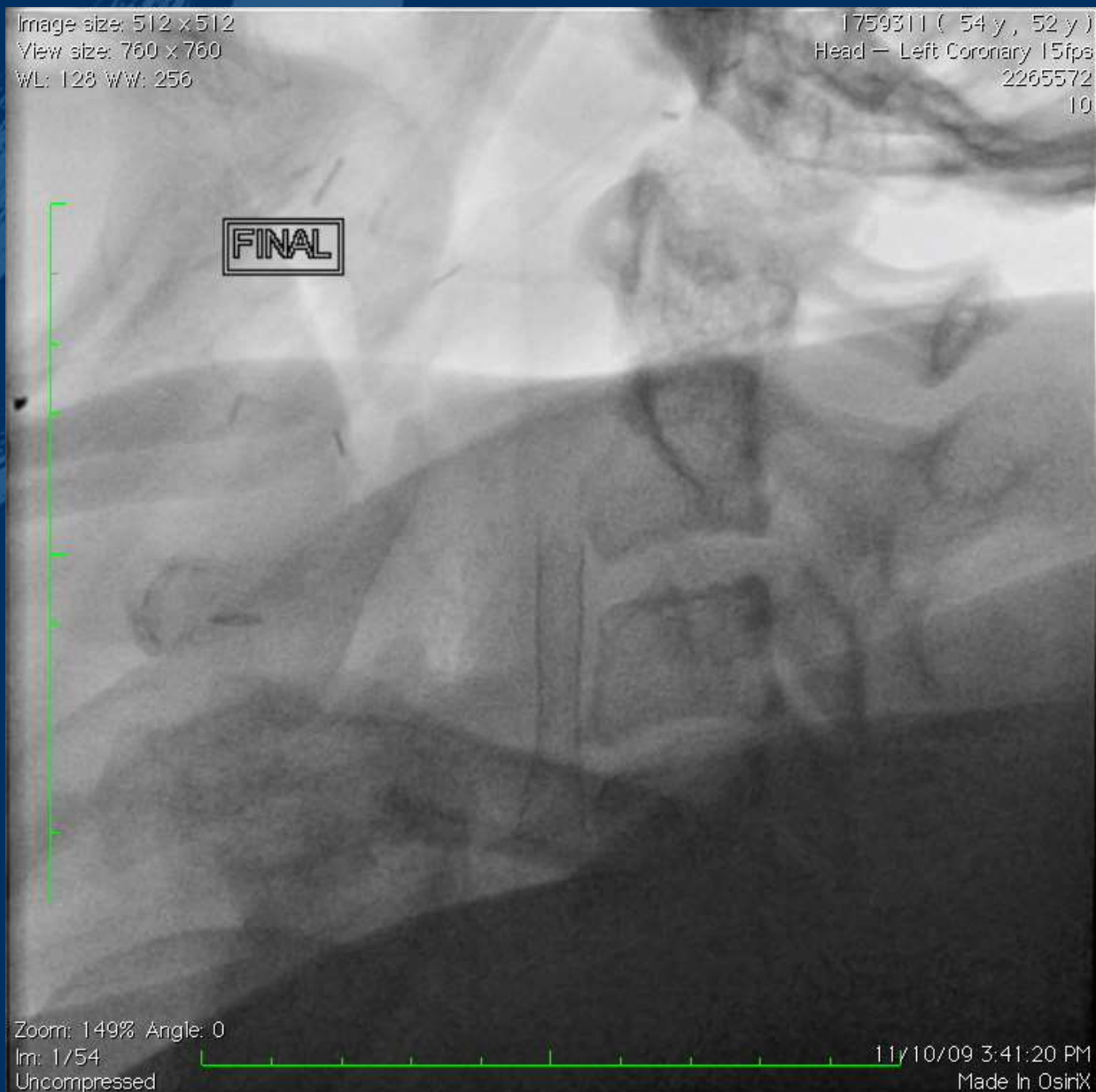
Better but
Intraluminal filling
defects still
present in stent

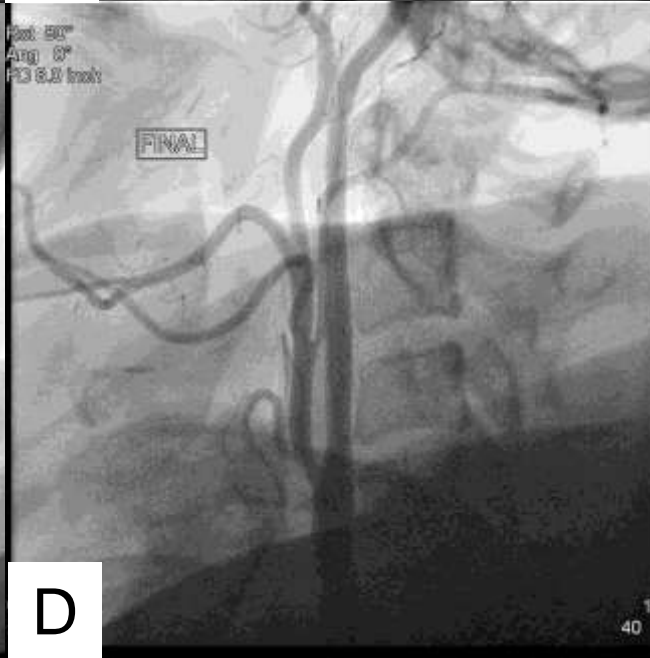
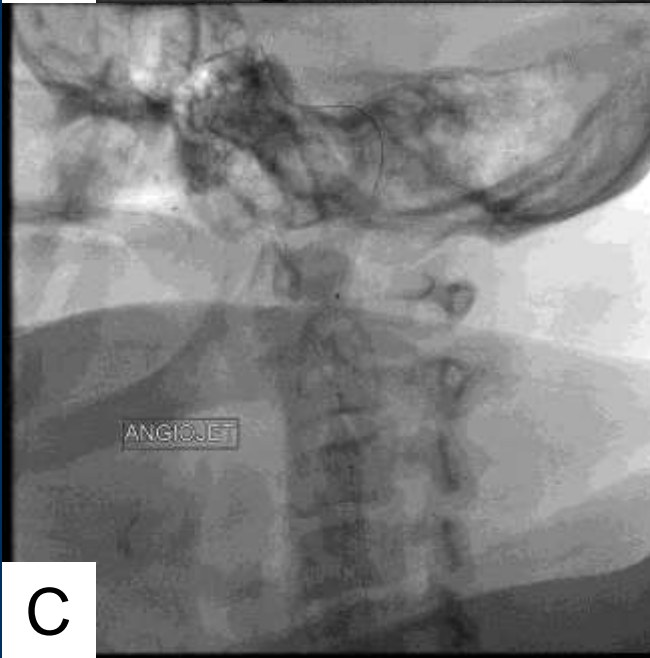
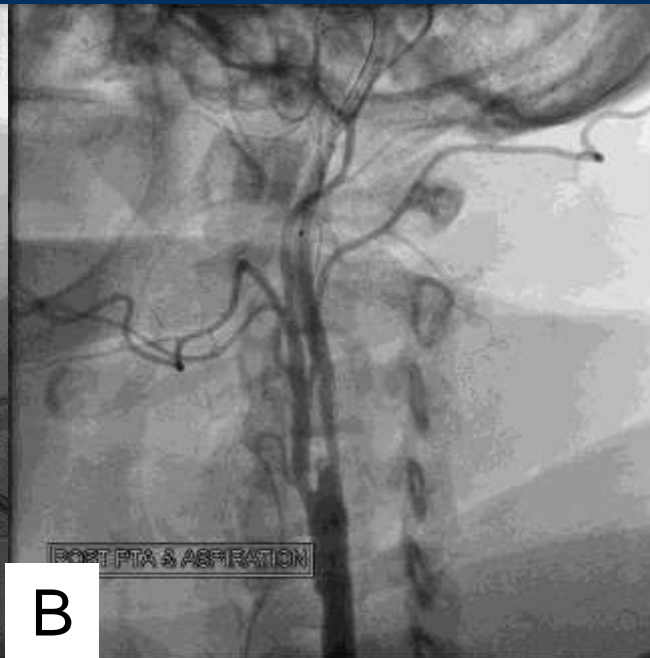
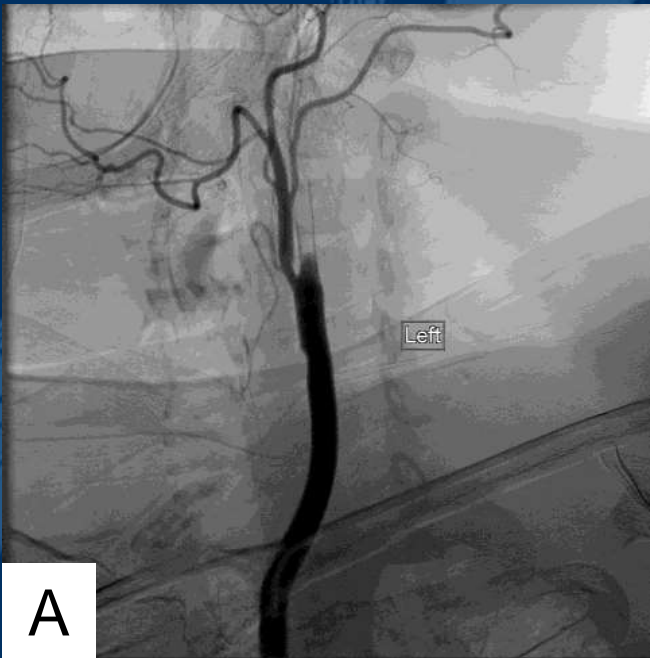
Now What?

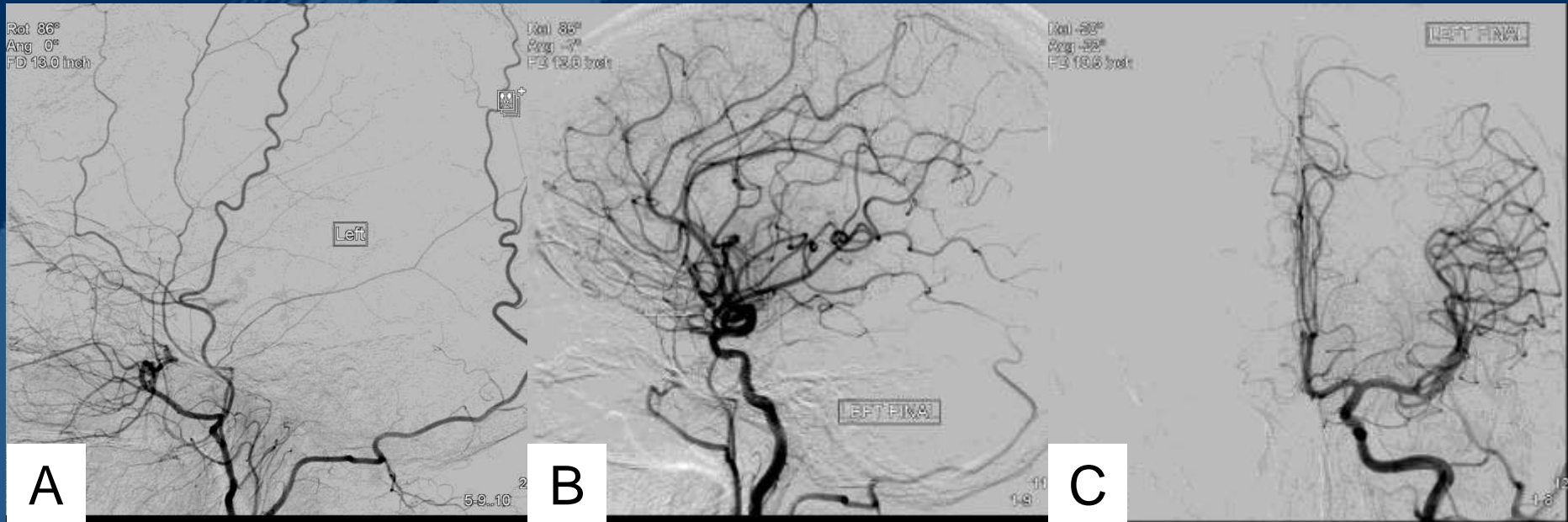
Additional
stent
deployed



EPD Captured - Final Result







A. Initial left cerebral angiogram
B Lateral and
C. AP Cerebral angiogram after successful intervention

Follow up

- Discharged with minimal residual right sided weakness
- ADL independent
- Subsequently returned to baseline neurologic status

Conclusions

- Stent thrombosis uncommon – case reports only
- Management individualized
- In acute presentation, technically possible to salvage a case of stent thrombosis

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