My Worst Carotid Complication

Ehrin J. Armstrong MD MSc

University of Colorado
Disclosure

Speaker name: Ehrin J. Armstrong MD

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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
Better but Intraluminal filling defects still present in stent

Now What?
Additional stent deployed
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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