Retrograde embolization of a symptomatic hypogastric artery aneurysm

Andrew W Unzeitig MD FACS
Piedmont Heart Institute, Atlanta, GA
Disclosure

Speaker name:

..........Andrew W Unzeitig.................................

I have the following potential conflicts of interest to report:

☐ Consulting

☐ Employment in industry

☐ Stockholder of a healthcare company

☐ Owner of a healthcare company

☐ Other(s)

☒ I do not have any potential conflict of interest
Case

- 88 yo male with history of open AAA repair 20 years ago presents with acute onset lower back and left groin pain.

- Very functional otherwise, cares for himself, mild aortic stenosis, HTN

- Exam: AFVSS, tender in LLQ, palpable distal pulses

- Labs: unremarkable
• CTA with >8cm left internal iliac aneurysm, stranding, possible contained rupture
• Occluded hypogastric origin, from previous open AAA repair
• Left side hyroureter
Plan

• OR for aortogram with attempted embolization, but most likely open repair of symptomatic/ruptured large internal iliac artery aneurysm
• 4Fr sheath Antegrade left CFA
• 4fr angled Glidecatheter to select medial circumflex femoral artery
• 2.7 fr ProGreat through the medial-circumflex to obturator artery collateral pathway
• Detachable coils deployed to fill sac and inflow, 2 large framing coils, 6 hydrocoils (CX and Azur coils; Terumo)
• Small branch off pudendal artery, unable to select
• 2k units of heparin given at start, reversed with 10 mg protamine
• Pressure held at arteriotomy sites
• To ward
POD 1

- Pain resolved
- Stable H/H
CTA POD 1
• Discharge POD 2
• One month CTA with slight decrease in sac size, persistent R CIA and IIA aneurysms
• Doing well at 6 mo followup, now 2 years post doing well, followed with duplex
Pre-op 6mo f/u
Hypogastric artery aneurysms are rare and often present with rupture.

- Dix et al. Eur J Vasc Endovasc Surg 2005 30, 119-129
  - Review of the isolated internal iliac aneurysm, 82 papers
  - 40% present with rupture, 30% mortality

Previous open surgical ligation or coverage of the origin after EVAR may preclude more common endovascular treatment methods.

- With antegrade occlusion, collateral pathways will dilate

Pre-op imaging with CT can guide best treatment options, increased suspicion in setting of previous AAA repair

Embolization via femoral artery-hypogastric collaterals can be a helpful adjunct and should not be overlooked, even in emergency cases.
Thank you
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