An interesting case of a ruptured Iliac artery during EVAR

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Disclosures

- Consultant
  - Medtronic
  - W L Gore
Introduction

• Inadequate iliac artery diameter, tortuosity, and atherosclerotic disease have been associated with increased risk of rupture during EVAR. (Fernandez et al.)

• The EUROSTAR experience demonstrates iliac artery access problems due to excessive tortuosity, stenosis, or small caliber at a rate of 13% (Harris et al.)

• Iliac artery rupture is a source of increased morbidity and mortality.
Case Presentation

- 82 year-old female with 5.2 cm AAA
- Medical history:
  - COPD on 2L home oxygen
  - PVD
  - Smoker
  - NYHA class III
Case presentation cont.

- Pt had previously been evaluated for AAA repair but after extensive discussion regarding the risks, she decided not to proceed.

- She later returned symptomatic with abdominal pain.
- Long infrarenal neck
- Tortuous iliac artery anatomy
- Moderate bilateral iliac artery calcification
- Small caliber iliac arteries
• Right iliac artery less tortuous
• Generous infrarenal landing zone
• Small caliber, diseased left iliac arteries.
• Occluded left internal iliac artery.
• Tortuous
- Slightly less diseased
- Patent right internal iliac artery.
- Main body deployment from the right
- Main body in place and deployed from the right ride
- Trouble advancing a 12Fr dilator from the left
- Balloon angioplasty with 5mm balloon
• Left external iliac artery dissection
• 16x 10mm iliac limb deployed
• Followed by a 10mm x 93 iliac limb extension
• During deployment, the patient developed marked hypotension
• 10mmx10cm covered stent
• 10mm x 5cm covered stent placed to reinforce the overlap.
• On closer evaluation, there was continuous extravasation.
• A 9mm x 5cm covered stent was deployed to extend further into the external iliac artery.
• No further contrast extravasation
• Hemodynamically stable
• ? Abnormal filling of the common femoral artery
• Left common femoral artery repaired with an endarterectomy and patch.
• Completion angiogram
• Successful exclusion of the AAA.
Postoperative course

• The patient was monitored for 48 hours and remained hemodynamically stable.
• She was discharged home on POD 2
• Otherwise uneventful postoperative course.
• At 3 month follow up she is doing well.
Thank you
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