Endovascular treatment, in addition to anticoagulation, is recommended in patients with symptomatic mobile aortic mural thrombus

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Disclosure

Speaker name: James L. Ebaugh MD

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: Site co-investigator in multicenter RCT comparing best endovascular vs. surgical therapy in critical limb ischemia (BEST trial)

I do not have any potential conflict of interest
Symptomatic mobile aortic mural thrombi

- Mesenteric or limb threatening embolic events
- Traditionally treated with anticoagulation alone
- Recently more aggressive due to propensity to recur
  1. Stentgraft: arch and descending thoracic aorta
  2. Open aortotomy: paravisceral thrombus
  3. Aortobifemoral embolectomy: infrarenal thrombus

Case series

- Retrospective review: June 2016 – Aug 2018
- Included: aortic arch / descending thoracic aorta
- Excluded: infrarenal aortic thrombus / shaggy aortas

- 6 patients (5 female)
  - median age: 40.5 years (range 32-80 yrs)

- Four: descending thoracic aorta
- Two: aortic arch
Patient characteristics

- Overweight or obese: 100%
  (mean BMI 33.8, range 29-47)
- Heavy smokers (>1ppd): 67%
- Hyperlipidemia: 100%
- Diabetes: 50%
- Hypercoagulable: 67%

Presentation:
- Two: small bowel resections
- Three: lower extremity embolectomies and fasciotomies
- Two: left upper extremity embolectomies
Anticoagulation alone

Pt 1

3.5 months

Pt 2

3 months

Pt 3

7 months
Recurrent episodes in noncompliant patients

Pt 4
R AKA and L BKA by 35 years of age

Pt 5
Long SB resection, then left UE embolus 2 months later, 43 yrs old
Endovascular treatment

Pt 6: Thoracic aortic endografting for severe bilateral lower extremity ischemia
Highly mobile thrombus on TEE
24x55mm iliac limb extension

Tips for implantation:
- Oversize <10%
- No postimplantation ballooning
- 2cm prox/distal to lesion
- Difficult to see on angio: TEE and CTA helpful

3 months postop
Suggested algorithm

Anticoagulate only

Symptomatic?
  (No)
  (No)
  (Yes)

Endo candidate?
  (Yes)

Compliant?
  (Yes)

Mobile/pedunculated?
  (No)
  (Yes)

Stentgraft exclusion
Thank you!
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