A case of rapidly expanding SMA aneurysm in a patient with SLE and APLS

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Disclosure

Speaker name: 

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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
Introduction

- Visceral artery aneurysms are rare but can lead to high mortality if ruptured
- SMA aneurysms constitute about 6% of visceral aneurysms (60% splenic artery, 20% hepatic artery)
- Incidence is increasing due to increased CT imaging
- Etiology is unknown, but can be associated with systemic vasculitis, infection or dissection
Case

- 47 y/o female
- Chief complaint: 3-day history of severe abdominal pain
- Diagnosed of systemic lupus erythematosus (SLE) combined with antiphospholipid syndrome (APLS) 5 years ago (On prednisolone, hydroxychloroquine and warfarin)
- Presented with infective endocarditis (E. faecalis) 3 months ago, and underwent 6-week antibiotic treatment. An abdomen CT performed at that time showed a 1cm SMA aneurysm
Clinical presentation & Lab

• Fever (-)
• Leukocytosis (-), CRP normal
• Blood cultures negative
• ESR 20
• aPTT 68.0
• RF (-), FANA (+), LAC (+, 1:64), APL (+), β2-GP1 (+), anti-ds DNA 15.3, ANCA (-)
CT imaging #1

- CT at onset of abd. pain (3 days before)
- **3.1cm SMA aneurysm** with mild intraluminal thrombosis, no evidence of rupture and preserved bowel perfusion
CT imaging #2

- CT follow-up due to aggravating abd. pain (3 days later)
  - 3.4cm SMA aneurysm with complete lumen occlusion, but preserved bowel perfusion due to collaterals
Considerations

• Etiology
  • Mycotic? (culture-negative but based on previous history of infective endocarditis treatment)
  • Vasculitis?

• Treatment strategy
  • Endovascular vs open surgery
Treatment

- Surgical excision with saphenous vein interposition and branch reimplantation (4 out of 5 branches)
Postoperative course

- Perioperative heparinization
- Abd. pain resolution
- Postop antibiotics (1st gen cephalosporin) -> stopped after 10 days due to C. difficile diarrhea
Pathology

- Severe inflammation with myxoid degeneration
- Features of vasculitis were hard to determine
- Tissue cultures: negative
mycotic visceral aneurysm

55 y/o male with infective endocarditis d/t E. faecalis with multiple embolic cerebral infarctions, SMA aneurysm, splenic aneurysm, embolic infarctions in spleen and right kidney

13 days later

11 days later
Summary

• An unusual case of inflammatory (or mycotic) SMA aneurysm in a patient with SLE and APLS
  • Recent history of infective endocarditis but blood/tissue cultures negative
  • Rapid progression of the aneurysm could have led to poor outcomes, but was prevented by early diagnosis and surgical correction
• Aneurysms in patients with vasculitides (infection) should be dealt with more aggressively than other degenerative etiologies and should be corrected in a timely manner to prevent unfavorable outcomes
Physician-modified endografts (PMEG) for endovascular treatment of hostile AAA

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