















Postoperative Course

- POD #0: Remained intubated PACU→ MICU
- POD #2 : Extubated
- POD#3: NGT d/c'd, adv to clears, foley removed
- POD#4: Transferred to stepdown

- POD #5 : Tolerating regular diet
- POD#7: Discharged home, continues on IV abx
- **Pathology:** Saccular aneurysm with fresh clot and mural thrombus

Intraop cx: negative

DISCUSSION



Splanchnic Artery Aneurysms (SAA)

- Intra-abdominal aneurysms that are not part of the aortoiliac system
- Rare

-5% of all intraabdominal aneurysms -Prevalence: 0.1-0.2%

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Aneurysm incidence



Rutherford Vasc. Surg, 6th ed.

Splanchnic Artery Aneurysms (SAA)

- Life threatening
 ~22% present emergently
 8.5% mortality
- Etiology
 - degeneration
 - atherosclerosis
 - inflammation
 - collagen vascular dz
 - iatrogenic injury
 - trauma
 - infection



SMA Aneurysms (SMAA)

- 3rd most common SAA
 equal M:F ratio
- Main trunk
 - 1° affects proximal 5cm of SMA
- Harbors more infectious aneurysms than any other muscular artery

- Etiology **Mycotic (60%)**
 - Age <50
 - Left sided SBE
 - nonhemolytic strep (1°)

Non-cardiac

- Staph spp.
- Syphilis (past)
- Arteriosclerosis/CTD
- Trauma (rare)

Most likely SAA to dissect

- High risk of rupture (~50%)
- 30-90% mortality

Intestinal ischemia Free rupture Exsanguination



Clinical Findings

Presentation



- Abdominal pain
 intermittent→ persistent
- Nausea
- Vomiting
- GI Bleed
- Peritonitis (free rupture)



Clinical Findings

Diagnosis

 History and **Physical exam** - PMH, h/o SBE, trauma, surgery, recent procedure - Fever (20%), tender pulsatile mass (50%), evidence of **GIB**

• Labs

- anemia, leukocytosis,+ BCx
- Tests
 - U/S
 - **CT**, MRI
 - Arteriography



Treatment

<u>False aneurysms</u>

- Often w/ contained rupture at diagnosis (esp. mycotic)
- Surgery
 - removal of infected tissue
 - obliteration of the aneurysm
- Antibiotic therapy for 6–8 weeks

True aneurysms

- Infected \rightarrow Surgery
- Noninfected
 - Symptomatic \rightarrow Surgery
 - ASx \rightarrow variable

Individualized

 Etiology, size, location, pt comorbidities, procedural risk

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Mycotic SMAA

Preoperative goals

- Targeted abx therapy (broad spectrum if organism unk.)
- Tetanus prophylaxis if pt + IVDA

Operative goals

- Control of hemorrhage
- Confirmation of the diagnosis (tissue and culture)
- Control of sepsis, including removal of infected tissue and aneurysm resection
- Bowel viability
- Wound care
- Continuation of antibiotics for a prolonged period after operation



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Techniques

Simple Ligation w/ excision

- preformed collateral flow to intestines
- check bowel viability 1st

Arterial reconstruction

- Anterior Aorta or intact
 proximal SMA to nml vessel
- Use GSV

Endovascular

- Covered stent-graft
 - excludes aneurysm
 - preserves enteric circulation
 - feasible if anatomy favorable
 - High risk pt's
- Surgical intervention for all types of SMAA <15% mortality

Conclusions

- Rare diagnosis
- Often mistaken for common conditions
- Life threatening \rightarrow high index of suspicion
- Should be suspected in any pt with h/o abdominal pain and recent SBE
 - fever in a pt with visceral aneurysm= Mycotic
- Requires prompt intervention to avoid complications
- Surgery is the standard
- Maintenance of appropriate antibiotic therapy

References

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