SMA BYPASS FOR TREATMENT OF CHRONIC MESENTERIC ISCHEMIA

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• No financial disclosures to report.
CHRONIC MESENTERIC ISCHEMIA

• Uncommon and accounting <5% cases of intestinal ischemia
• Estimated only 340 open revascularizations performed yearly at non-federal hospitals in US
• Elderly women 70% of cases
• Most common presenting symptom is pain → “food fear” and eventual weight loss
• Dx:
  • Negative GI workup
  • Mesenteric duplex ultrasound vs CT (usually part of GI workup)
  • Mesenteric arteriography: “gold standard” to confirm duplex and CT findings
TREATMENT OPTIONS

• All patients with CMI should undergo revascularization
  • reduce pain, prevent bowel infarction, restore normal nutrition

• No randomized trials comparing endovascular vs open surgery

• Open revascularization carries longer patency rates, higher M&M

• Endo: pre-dilation followed by 7-8mm balloon expandable stent

• Open: antegrade vs retrograde, PTFE vs dacron vs autogenous vein
36 yo male presents with chronic mesenteric ischemia
- PMH: HTN, long-time smoker
- Abdominal cramping, post-prandial pain, and bloating with meals
- 80# (~36kg) weight loss in last 4 months
- Negative GI and rheumatologic workup

Mesenteric duplex ultrasound revealed high resistive indices suggestive of flow-limiting stenoses in the mesenteric vessels

Underwent mesenteric arteriogram

Treated successfully with open R iliac-SMA bypass using PTFE conduit
• Flush occlusion of celiac, SMA, IMA vessels
• Large meandering mesenteric collateral from L iliac feeding celiac and mesenteric axes
• Patent iliac system bilaterally
OPEN REVASCULARIZATION

• Underwent laparotomy, right iliac to proximal SMA bypass using 6mm PTFE
• Meandering artery identified and protected
• “Lazy C” configuration
Mesenteric meandering artery
POST-OPERATIVE COURSE

• Started on ASA, pletal, plavix

• Advanced to regular diet, tolerated well without intestinal angina

• Discharged POD6, doing well in outpatient follow-up
• Post-operative CTA showing patent bypass graft with distal flow into tertiary SMA branches
CONCLUSION

• Successful SMA revascularization using right iliac to SMA bypass using PTFE graft
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