Coil embolization of acutely expanding spontaneous splenic artery dissection

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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

X
Patient presentation

44 male with hypertension

Sudden onset of constant LUQ / mid abdominal pain

Celiac dissection

Responded to lowering BP

Discharged from hospital after 2 days
Readmitted with abrupt increase of unremitting pain

- CT findings:
  - Dissection limited to celiac artery and its branches
  - Only the splenic artery appeared to enlarge

- moderate to severe hepatic artery stenosis
- small splenic infarcts
Diffuse dilation of splenic artery

2 days
Coil embolization

- Celiac trunk accessed:
  - Visceral Selective 2 catheter and .035 Benson wire
- 5Fr Ansel sheath tip placed in proximal splenic artery
- 4Fr Kumpe Slipcath passed to terminus of dissection
- 18 coils placed
Coils used

11 AZUR D35 (Terumo)
  3 AZUR CX 35
  4 Nester (Cook)

(Diameters ranged 10-15mm, lengths 14-34cm, 2 framing coils used)
Procedure (cont.)

Hepatic artery not seen on selective splenic artery injection

Hepatic artery unaffected on aortagram

Left gastric artery supplies spleen via short gastrics
9 months post-procedure
Celiac / Splenic artery dissection

Males 5:1, average age: 55 years old, HTN
Other risk factors:
    vascular disease, pregnancy, iatrogenic/traumatic, infectious

Complications mandating treatment:
    aneurysm formation, arterial occlusion, rupture

Consensus:
• 75-90% treated with observation, BP control, ± anticoagulation
• Surgical or endovascular management reserved for:
  1. Hemodynamic instability
  2. Persistent abdominal pain
  3. Progression of dissection

Similar cases in the literature

No cases of refractory dilation of the splenic artery in literature.

Three cases of rupture of spontaneous celiac artery dissection.\(^1,2\)

Analogous to Sakamoto type 2 or 5 SMA dissections.\(^3,4\)

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