Should Mesenteric Revascularization Be Staged: Report of 3 Cases One With Reperfusion Hemorrhage

Ayhan Olcay MD¹, Kivanc Yalin MD¹, Sukriye Ebru Golcuk MD¹, Sukru Sanli MD²

1. Bayrampasa Kolan Hospital, Department of Cardiology, Istanbul, Turkey
2. Bayrampasa Kolan Hospital, Department of Radiology, Istanbul, Turkey
Disclosure

Speaker name: AYHAN OLCAK 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(s)

☒ I do not have any potential conflict of interest
Chronic Mesenteric Ischemia (CMI)

Presenting symptoms:

- Abdominal pain (92%), Weight loss (87%)
- Diarrhea (44%), Anorexia (33%), food fear (18%)
- Most commonly atherosclerotic
- Female (70%) > Male
- Generally 2/3 mesenteric arteries must be stenotic for patient to be symptomatic
- SMA revascularization is the key!
One or Two Vessel Stenting

- Two vessel stenting was associated with more complications (33%) compared with stenting of SMA (18%) or celiac stenting (6%)
- Higher restenosis in CA (*Malgor RD*)
- Symptom recurrence lower with 2 vessel stenting (24% vs 6%) (*Silva JA*)
- Reperfusion hemorrhage in CMI not addressed in literature except case report (*Moore M*)
SMA Only vs Complete OR

• Bypass grafting to the SMA alone appears to be both an effective and durable (Foley MI)
Patient 1

- A 70 yr man, HT, DM Type 2, PAD, CABG
- Typical CMI symptoms and severe weight loss
- CT angiography: severe CA stenosis, total SMA occlusion and stenotic IMA
- Previous endovascular intervention failed
- CA and total SMA was stented in same session transaxillary
- Severe hematemesis 6 hour after intervention
- Discharged after 5 days on Clopidogrel and pantoprazol
Patient 1

7x18 mm balloon expandable stenting of celiac stenosis

5x30 balloon expandable stenting of total SMA in the same session
Gastric bleeding in patient 1

- Multiple gastric ulcerations in gastroscopy 48 hours after bleeding.
- No ulcers in gastroscopy 15 days before procedure
Patient 2

- A 65 yr woman, HT, CRF Cr 1.8 mg/dl
- Atherosclerotic
- CA and left renal stenting 6 month ago, total SMA was not intervened, IMA was open
- Typical recurrence of CMI symptoms
- CA, total SMA and left renal was revascularized transfemorally
- Patient discharged without any complications
Patient 2

7x20 mm balloon expandable stenting of celiac stent restenosis

5x30 mm balloon expandable stenting of SMA occlusion in the same session
Patient 3

- A 55 yr man, HT, Smoker
- Typical CMI symptoms and bilateral leg intermittent claudication
- CT angiography: Severe CA stenosis, SMA subtotal occlusion, stenotic IMA and severe distal aortic stenosis
- SMA was stented first but patient started to have abdominal pain and CA stenting postponed.
- Patient discharged 2 days later without bleeding or peritoneal irritation and CA and distal aorta was stented 5 months later.
- Patient discharged without any complications
Patient 3

6x30 mm balloon expandable stenting of SMA stenosis

7x22 mm balloon expandable stenting of celiac stenosis 5 month later
Successful endovascular treatment of severe chronic mesenteric ischemia by concurrent triple-vessel mesenteric artery revascularization

George Joseph a,*, Sunil Agarwal b

a Department of Cardiology, Christian Medical College, Vellore, India
b Department of Vascular Surgery, Christian Medical College, Vellore, India

A 52-year-old man presenting with severely symptomatic chronic mesenteric ischemia had proximal occlusion of the celiac and superior mesenteric arteries and critical stenosis of the inferior mesenteric artery ostium. Concurrent percutaneous revascularization with stenting of all three mesenteric arteries was successfully achieved using techniques tailored to each lesion. Complete clinical recovery was observed at the six-month post-procedure follow-up.

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We suggest to stop interventional urge to do all in one session.

Cardiology CTO experience is very valuable but be careful about peritoneal signs and collaborate closely with surgery!

ER of two vessel may provide better symptomatic relief but staging should be tested in randomized trials.

Multivessel ER becomes more widely used for CMI and strategies to reduce reperfusion hemorrhages are needed (heparin, antiaggregants, staging ..)

Conclusions
References

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2. Bayrampasa Kolan Hospital, Department of Radiology, İstanbul, Turkey