

VEITH
re canalizing long complex SMA occlusions
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Disclosures

- I have the following potential conflicts of interest to report:
 - Receipt of grants/research support
 - Receipt of honoraria and travel support
 - Participation in a company-sponsored speaker bureau
 - Employment in industry
 - Shareholder in a healthcare company
 - Owner of a healthcare company
- I do not have any potential conflict of interest

treatment indications

- all patients with symptomatic CMI should be revascularized.
- prophylactic revascularization is controversial
- no place for medical treatment (no vasodilators, parenteral nutrition) - mortality up to 70% * (malnutrition)

*Serdon Met al. Vasc Endovascular Surg. 2015; 49: 37

delayed revascularization may potentially increase mortality

treatment indications

Recommendation 18	Class	Level of evidence
In patients with symptomatic CMI caused by multi-vessel occlusive disease, revascularisation is recommended	I	B

Eur J Vasc Endovasc Surg 2017; 53:460-510

1. We recommend revascularization in patients with CMI to reverse their presenting symptoms (ie. weight loss, food fear, diarrhea, postprandial pain) and improve their overall quality of life. Level of recommendation: Grade 1 (Strong). Quality of Evidence: A (High)

J Vasc Surg 2021; January supplement

treatment strategy

revascularization

- **SMA ++**
- CT & IMA if SMA not possible

Recommendation 22	Class	Level of evidence
In patients requiring revascularisation for CMI, the SMA is the main target vessel using either open or endovascular techniques	I	B

Eur J Vasc Endovasc Surg 2017; 53:460-510

3. We suggest that the SMA is the primary target for revascularization. Level of recommendation: Grade 2 (Weak). Quality of Evidence: B (Moderate)

J Vasc Surg 2021; January supplement

treatment options

Recommendation 21	Class	Level of evidence
In patients with CMI, needing revascularisation, the superior long term results of open surgery must be offset against a possible early benefit of endovascular intervention with regard to peri-procedural mortality and morbidity.	I	B

Eur J Vasc Endovasc Surg 2017; 53:460-510


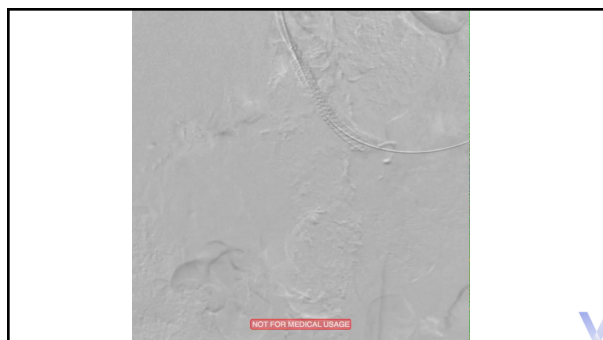
2. We recommend endovascular revascularization as the initial treatment for patients with CMI and suitable lesions. Level of recommendation: Grade 1 (Strong). Quality of Evidence: B (Moderate)

J Vasc Surg 2021; January supplement

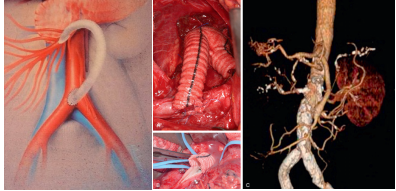
endovascular approach

- **endovascular surgery is preferred in:**
 - short focal stenosis or occlusion
 - minimal to moderate calcification or thrombus
- **even if more challenging, can be performed in:**
 - long occlusions extending to mid-segment SMA
 - severe eccentric calcifications
 - flush occlusions

male, 67 YO, heavy smoker

open surgery



Rutherford Vascular Surgery 8th edition

Recommendation 25	Class	Level of evidence
In patients with CMI, open revascularisation should be considered in the following situations: i) In a patient who has failed endovascular therapy or ii) In patients who are not candidates for endovascular intervention because of extensive occlusion and calcification precluding safe angioplasty and stenting or iii) In young patients with complex non-atherosclerotic lesions caused by vasculitis or mid-aortic syndrome	IIa	B

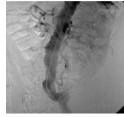
Eur J Vasc Endovasc Surg 2017; 33:460-520

3. We recommend reserving open surgical revascularization for patients with CMI who have lesions that are not amenable to endovascular therapy, endovascular failures, and a select group of younger, healthier patients for whom the long-term benefits may offset the increased perioperative risks. Level of recommendation: Grade 1 (Strong). Quality of Evidence: B (Moderate)

J Vasc Surg 2021; January supplement

open surgery

- open surgery implies selection of:
 - approach (trans- vs retroperitoneal)
 - conduit (vein vs prosthetic)
 - inflow (aorta vs iliac arteries)
 - vessel target (single vs multiple)
- should be tailored according to:
 - anatomy
 - clinical risk assessment



open surgery

- poor physiological reserve (**most of CMI patients**)
 - bad candidates for supra-celiac aortic reconstructions
 - inflow from IR aorta or an iliac artery is preferable
 - consider retrograde open mesenteric stenting

Recommendation 26	Class	Level of evidence
In patients needing mesenteric revascularisation, ROMS should be considered when trans-aortic stenting and open reconstruction are impossible	IIa	C

Eur J Vasc Endovasc Surg 2017; 53:460-510

take home messages

- CMI is rare and can have devastating consequences
- revascularization must be performed in symptomatic patients
- SMA is the primary goal
- endovascular approach is nowadays the first option
- open surgery should be reserved for poor endovascular candidates



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