



2019 European interdisciplinary guideline on Chronic Mesenteric Ischemia (CMI)

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2019 Eur guideline on CMI panel: 4 expert groups

Medical history and diagnostic criteria	Radiological imaging	EV treatment	Surgical treatment and secondary prevention
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2019 Eur guideline on Chronic Mesenteric Ischemia (CMI)

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- 14 expert pannel (physiologists, vasc surg, gastro enterologists, diagnosis and interventional radiologists, IC spec)publishing on CMI within 10 last y
- **Modified Delphi method**
- to guide the evaluation process, the **GRADE “evidence to decision”** (EtD) framework was used (Alonso-Coello, 2016, GRADE EtD frameworks, BMJ).

GRADE: 1A : **strong** reco , **high quality of evidence**
1B: **strong** recommendation, **moderate quality** of evidence
1C: **strong** recommendation , **low** quality of evidence
1D: **strong** recommendation, **very low** quality of evidence

2A: **weak** recommendation, **high** quality of evidence
2B: **weak** recommendation, **moderate** quality of evidence
2C: **weak** recommendation, **low** quality of evidence
2D: **weak** recommendation, **very low** quality of evidence

Diagnostic criteria

	GRADE	Expert agreement
Recom 6 : for the presumptive diagnosis of CMI with single-vessel stenosis of CA or SMA , after proper exclusion of alternative diagnoses and no available functional test, the following symptoms should be present : <ul style="list-style-type: none">- post prandial abdominal pain,- and either weight loss (> 5% body weight) or an adapted eating pattern	2D	91%
Recom 7: a presumptive diag of chronic NOMI is based on a combination of <ul style="list-style-type: none">- compatible symptoms,- absence of significant Mes Art stenoses- and, preferably, a positive functional test. In presumptive pat. with severe cardiac disease, pulmonary disease or in dialysis underlying causes and treatment should be discussed	2D	87%

Diagnostic modalities

	GRADE	Expert agreement
Recom 8: in symptomatic pat. with single-vessel disease of either the CA or SMA, a ≥ 70% stenosis could be considered relevant.	2D	87%
Recom 9: in symptomatic pat with extensive multivessel Mes Art disease, a ≥ 50% stenosis of the SMA could be considered relevant.	2D	78%

Diagnostic modalities

	GRADE	Expert agreement
Recom 10: in pat. with suspected CMI, a CTA should be performed. (≤ 1 mm acquisition slice th, arterial and venous/portal venous phase)	1C	91%
Recom 11: CE-MRA = diag test of choice in case of a Contra Indication for CTA.	1C	87%
Recom 12: Duplex UltraSound –performed by an experienced technician – might be used to <u>exclude</u> significant proximal Mes Art stenosis. <u>Additional CTA or MRA</u> is required for patients <u>with a positive Duplex US.</u>	2C	78%
Recom 14 : CA compression in MALS (Median Arcuate Ligament Syndrom) can be diagnosed by inspi/expir DUS, CT or CE MRA. Younger age: Duplex US and CE-MRA (≤ 2 mm sl, 3D recons) recommended	1D	74%

Treatment: surg vs EV ; nutritional status

	GRADE	Expert agreement
Recom 16 : mesenteric bypass might be reserved for patient in whom EV revasc. is not suitable.	2C	100%
Reco17: before revasc it might be disadvantageous to: <ul style="list-style-type: none">- increase oral intake,- start enteral tube feeding- or start total parenteral nutrition	2D	96%

Treatment : PTA, PMAS

	GRADE	Expert agreement
Recom 18: the preferred entry site = femoral Art , followed by the left brachial or radial Art, and is dependent on expertise	1D	87%
Recom 19: In atherosclerotic Mes Art lesions , PTA and stenting is recommended over PTA alone	1D	100%

Treatment : PTA, PMAS; antiplatelet tt

	GRADE	Expert agreement
Recom 20: in pat with occlusive disease of both CA and SMA , EV revasc of both vessels might be attempted. The SMA is the preferred target Art, followed by the CA	2D	91%
Recom 21: after EV Mes Art stenting , we suggest administering dual antiplatelet therapy for at least 1 month , followed by life long antiplatelet monotherapy.	2D	91%
Recom 22: in pat treated with DOAC , vit K antagonists or LMWH, we suggest adding one antiplatelet agent for 4 w after EV Mes Art stenting.	2D	83%

Treatment: surgery

	GRADE	Expert agreement
Recom 23: there might be no preference for an antegrade or retrograde approach when performing mesenteric bypass	2D	81%
Recom 24: there might be no preference for venous or prosthetic grafts when performing mesenteric bypass .	2D	71%

Treatment: MALS (Median Arcuate Ligament Syndrom)

	GRADE	Expert agreement
Recom 25: pat with MALS might be considered for surgical CA release	2D	96%
Recom 26: in pat with MALS (and no preceding adequate CA release) EV stenting of the CA is Contra-Indicated	1D	100%

Treatment: vasculitis; Asymptomatic Mes Art stenosis

	GRADE	Expert agreement
Recom 27: in pat with symptoms and radiological features of vasculitis , referral to an expert in the tt of vasculitis in indicated before proceeding to ER	1D	83%
Recom 28: revascularization to prevent occurrence of AMI in <u>A</u>symptomatic pat with significant stenosis/occlusion of all 3 Mes vessels should only be performed after carefully weighing the risks and benefits of tt, given the low level of evidence.	2D	83%
Recom 29: in <u>A</u>symptomatic pat with significant sten/occlusion of 2 or more Mes vessels who need major adbominal surgery + potential ligation of collateral circulation, EV intervention may be considered to prevent occurrence of AMI.	2D	74%

Treatment: Follow Up

	GRADE	Expert agreement
Recom 32: in a pat with recurrence of symptoms , DUS and/or CTA are recommended to assess in-stent stenosis	1D	100%
Recom 33: in pat without improvements in symptoms after CA release , inspiration/expiration Duplex US, CTA or CE-MRA should be performed.	1D	83%

