PROMOTE-ALI

Shows That Open Surgery Is Still Number One In The Treatment Of ALI

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on behalf of the
European Vascular Research Collaborative (EVRC)
Veith Symposium 2024

DISCLOSURES

Consultant - Medistim

Acute Limb Ischemia

Eur J Vasc Endovasc Surg (2020) 59, 173–218

CLINICAL PRACTICE GUIDELINE DOCUMENT

Editor's Choice – European Society for Vascular Surgery (ESVS) 2020 Clinical Practice Guidelines on the Management of Acute Limb Ischaemia

Martin Björck [*,a], Jonothan J. Earnshaw [a], Stefan Acosta [b], Frederico Bastos Gonçalves [c], Frederic Cochennec [d], E.S. Debus [e], Robert Hinchliffe [f], Vincent Jongkind [g], Mark J.W. Koelemay [g], Gabor Menyhei [h], Alexei V. Svetlikov [i], Yamume Tshomba [j], Jos C. Van Den Berg [k]

Recommendations on treatment of ALI refer to data from the **last decade/century**

"Despite the 28 RCTs from the literature, there is a great need for future research to enable improvement of the management of patients with ALI."

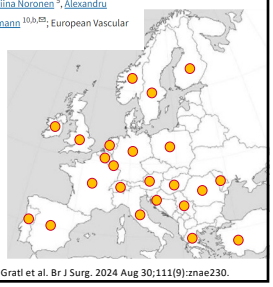
Prospective multicentre observational study evaluating acute lower limb ischaemia (PROMOTE-ALI)

Alexandra Gratl [1], Albert Busch [2], Caroline Caradu [3], Panagiotis Doukas [4], Katariina Noronen [5], Alexandru Predenciuc [6], Lan Tran [7], Christian Zielasek [8], Petar Zlatanovic [9], Florian K Enzmann [10,b,✉]; European Vascular Research Collaborative (EVRC)

36 European centers

705 patients

Recruitment period:
1.12.2021 - 31.5.2023



Gratl et al. Br J Surg. 2024 Aug 30;111(9):znae230.

Promote ALI - Methods

Definition of ALI: Symptoms < 2 weeks

Primary endpoint:
Amputation **F**ree **S**urvival
@ 90 days

Secondary endpoints:

Limb salvage and Survival
Freedom from target limb reintervention
Complications: bleeding, acute kidney injury
Clinical outcome of the index leg

Informed consent within **72 hours** of arrival

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RESULTS

OVERALL AFS @ 90 Days
84.4%

Secondary Endpoints:

Limb salvage	**90.6 %**
Survival	**92.2 %**
Freedom from target limb reintervention	**85.7%**
Acute kidney injury	**7.4 %**

Clinical outcome of the index leg:

Asymptomatic	**61.4 %**
Claudication	**32.5 %**
Rest pain	**1.3 %**
Tissue loss	**4.6 %**

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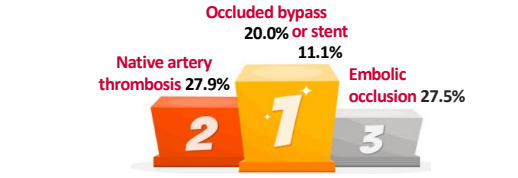
Risk Factors for loss of AFS @ 90 Days

Risk factor	Univariable analysis		Multivariable analysis[1]	
	HR (95% c.i.)	*P*	HR (95% c.i.)	*P*
Rutherford grade III ALI	3.07 (1.97,4.80)	<0.001	2.19 (1.36,3.51)	0.001
No revascularization	3.56 (1.91,6.65)	<0.001	2.73 (1.41,5.29)	0.003
Occlusion aorta	3.29 (1.81,6.00)	<0.001	1.89 (0.96,3.73)	0.067
Occlusion crural	1.88 (1.27,2.79)	0.002	1.36 (0.85,2.17)	0.197
Three or more levels of occlusion	2.93 (1.97,4.35)	<0.001	1.94 (1.18,3.16)	0.008
Acute kidney injury[†]	6.68 (4.40,10.13)	<0.001	5.21 (3.40,8.00)	<0.001
Additional revascularization	1.58 (1.00,2.50)	0.051	–	–
Blood transfusion	2.41 (1.29,4.49)	0.006	1.29 (0.67,2.47)	0.450

Reasons for ALI – 705 patients



Runner-ups: Iatrogenic 6.2%; Thrombosed aneurysm 4.4%; Traumatic 0.9%

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AFS @ 90 Days & Aetiology

Occluded bypass	80.9% (n=114)
Occluded stent	90.0% (n=70)
Native artery thrombosis	87.8% (n=173)
Embolic event	83.5% (n=162)
Iatrogenic	81.8% (n=36)
Thrombosed aneurysm	87.1% (n=27)
Traumatic	50% (n=3)

Clinical Status on arrival

Rutherford classification

Grade I	13.9% (n=98)
Grade IIa	35.5% (n=250)
Grade IIb	40.7% (n=287)
Grade III	9.9% (n=70)

Duration of symptoms 24 hours (2-336h)

Heparin administration 65.1 % (n=459)

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AFS @ 90 Days & Rutherford

Rutherford Grade I	93.8 % (n=92)
Rutherford Grade IIa	90.0 % (n=225)
Rutherford Grade IIb	81.2 % (n=233)
Rutherford Grade III	64.3 % (n=[illegible])

???!

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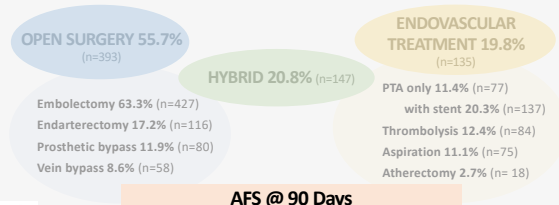
Revascularization for 95.7% (n=675)



AFS @ 90 Days

Open Surgery	85.0 % (n=334)
Endovascular Treatment	88.1 % (n=119)
Hybrid	83.7 % (n=123)

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Conclusions

Aetiology of acute limb ischemia is changing

In revascularization strategies open surgery and embolectomy and are still No 1

Revascularization for ALI yields excellent results

Rutherford Classification needs further evaluation