Clinical evidence and gap analysis in intermittent claudication

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Disclosure

Speaker name: ...Erich Minar

I do not have any potential conflict of interest
Gap analysis

* Risk factor control

* Indication for primary revascularization?

* Which kind of revascularization?

* Which kind of endovascular therapy?

* Adequate study endpoints in claudicants?
Gap analysis

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Effects of adherence to guidelines for the control of major cardiovascular risk factors on outcomes in the REduction of Atherothrombosis for Continued Health (REACH) Registry
Cacoub P et al on behalf of the REACH Registry Investigators Heart 2011;97:660-667

PAD patients are less likely to receive a lipid-lowering or an antithrombotic agent.
CONCLUSIONS:
The fundamental elements of medical therapy in patients with lifestyle-limiting claudication are often underutilized before referral for revascularization. Appropriate medical therapy before percutaneous revascularization is associated with fewer peripheral vascular events at 6 months.

The quality and impact of risk factor control in patients with stable claudication presenting for peripheral vascular interventions.
Ardati A et al; Circ Cardiovasc Intervent 2012; 5:850-5
Management of intermittent claudication

Conservative therapy
(Risk factors control, exercise training, pharmacotherapy 3–6 months)

Knowledge

Clinical practice

Gap
Underutilization
Gap analysis

* Risk factor control

* Indication for primary revascularization?

* Which kind of revascularization?

* Which kind of endovascular therapy?
ESC Guidelines on the diagnosis and treatment of peripheral artery diseases

Management of intermittent claudication

Conservative therapy
(Risk factors control, exercise training, pharmacotherapy 3–6 months)

Favourable results

No favourable results

Image lesions

Endovascular therapy feasible?

yes

Endovascular therapy

no

Bypass surgery

Follow up:
- Symptoms
- CV risk control
Treatment of claudication: Exercise vs PTA
Successful Revascularization

Patency

ESC

Improvements in technique and technology

TASC I

TASC II

The Adjuvant Benefit of Angioplasty in Patients with Mild to Moderate Intermittent Claudication (MIMIC) Managed by Supervised Exercise, Smoking Cessation Advice and Best Medical Therapy: Results from Two Randomised Trials for Stenotic Femoropopliteal and Aortoiliac Arterial Disease

R Greenhalgh et al; EJVES 2008 36, 680-688

4 years – 119 patients in 22 centers: 1.3 patients /center /year

Supervised Exercise Versus Primary Stenting for Claudication Resulting From Aortoiliac Peripheral Artery Disease
Six-Month Outcomes From the Claudication: Exercise Versus Endoluminal Revascularization (CLEVER) Study

Circulation 2012;125:130-139
In patients with disabling intermittent claudication that impacts their activities of daily living, with culprit lesions located at the aorta/iliac arteries, revascularization (endovascular or surgical) should be considered as first-choice therapeutic option, along with the risk factor management.
How would you treat this patient with claudication??

Conservative (exercise program, BMT) ?

Endovascular revascularisation ?

Open surgery ?
How would you treat this patient with claudication?

- Conservative? (exercise program, BMT)
- Endovascular revascularisation?
- Open surgery?

**Gap analysis**

- Risk factor control
- Primary revascularization?
- Which kind of revascularization?
- Which kind of endovascular therapy?
- Adequate study endpoints in claudicants?
Revascularisation

(Whenever technically possible TASC A – D)

Level of Evidence: C - this gap will never be closed
Endovascular Strategy

1. What is best for longterm patency?
2. Economic considerations

Large deficits in evidence

Many gaps to be filled

RCT
(High-quality) single arm trials

(Which) Stents?
Drug coated devices?
Debulking?
etc
TASC A/B – RCT

TASC C/D

(High-quality) single arm trials
Real world / all-comers
Gap analysis

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Different perspectives and priorities of those who manage PAD.

Noninvasive clinicians who assess and treat PAD with exercise gravitate to functional end points, whereas invasive clinicians and surgeons focus on end points more familiar to their clinical practice such as restenosis and repeat revascularization.
What are the most meaningful endpoints which are considered adequate with regards to (revascularization)therapy for claudicants?

Currently: mainly focused on lesion-specific endpoints - primary patency?

**Lack of patient-centric endpoints:**

- Walking capacity (treadmill, 6-minute walk test)
- Quality of life
Conclusions:

Gaps will remain, but…

in clinical practice, the ideal approach for any patient will depend on a number of factors and tailoring of therapy will be important to achieve the optimal outcome for an individual.
Treating claudication in five words

Stop smoking and keep walking

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