The angiosome concept has not been proven helpful in the treatment of CLI with gangrenous or ulcerated lesions.

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Disclosure

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What is an angiosome?


What is the angiosome concept as applied to the foot?

Anterior tibial artery
• Doralis pedis
Posterior tibial artery
• Medial plantar
• Lateral plantar
• Calcaneal
Peroneal artery
• Lateral calcaneal
• Anterior perforator

What does direct or indirect revascularization of an angiosome mean?

- **Direct Revascularization (Direct)**
  - Revascularization performed to the major artery supplying the angiosome in which the wound was located

- **Indirect Revascularization (Indirect)**
  - Revascularization performed to an artery not directly supplying the angiosome in which the wound was located


Angiosome concept = angiosome revascularization
2. The angiosome concept alone is not sufficient!

1. You have to understand the pedal arch (direct vs indirect)

2. You need to have adequate perfusion of the affected portion of the angiosome

Pedal Arch

- Single most important collateral in foot
- A fully intact pedal arch is rare in diabetics

Abstract presented at EVS September 25, 2014
Stockholm, Sweden

Quality of pedal arch
- no influence on patency or amputation free survival
- Improved rates of healing and time to heal
4. Revascularization does not necessarily imply adequate perfusion?

Why were 10-15% of legs not salvaged?
- Infection
- Wound management
- ... or was there inadequate perfusion?

Why were 70% of legs salvaged?
- ... they were adequately perfused!

Clinical implications of the angiosome model in peripheral vascular disease

Differential impact of bypass surgery and angioplasty on angiosome-targeted infrainguinal revascularization

Systematic Review and Meta-analysis of Direct Versus Indirect Angiosomal Revascularization of Infrainguinal Arteries

Why were 70-15% of legs not salvaged?
- Infection
- Wound management
- ... or was there inadequate perfusion?
The angiosome concept has not been proven helpful in the treatment of CLI with gangrenous or ulcerated lesions.

To heal a wound we need to have adequate perfusion.

The angiosome concept is valid but we have to precisely define direct revascularization vs indirect revascularization if we are to compare.

We need to be able to assess perfusion to be able to assess our revascularization benefit!

The angiosome concept has not been proven helpful in the treatment of CLI with gangrenous or ulcerated lesions.

- Interventionalists are not really applying the angiosome concept—they are performing tibial/peroneal revascularization.
- Pedal arch and distal artery disease for the angiosome are not easily treated and are ignored.
- To heal a wound we need to have adequate perfusion. Revascularization does not necessarily mean adequate perfusion—we need to assess physiologic improvement not just cosmetic results.

Vote Against the Motion!!

Is angiosome-supported revascularization for CLI evidence based?

a) preliminary, retrospective studies
b) heterogeneity in patient selection, associated comorbidities, types of CLI, pathologies, types of ulcers, differences in clinical endpoints, and follow-up features, etc.
c) "the most suitable angiosome-dependent artery" to treat is not necessarily the simplest vessel to recanalize
d) role of arterial collaterals and their precise quantification before and after limb revascularization remains to be determined.