Peripheral Vascular Evaluation

History

- Asymptomatic vs Symptomatic
- Claudication: “Non-limb threatening”
- “Disabling Claudication”
- Resting Ischemic Pain, Spontaneous Gangrene or non-healing ulcerations: “Limb-Threatening”
Ischemic ulcers etiologies

- Arterial insufficiency secondary to atherosclerosis
- Thrombo-embolism
- “Poor circulation” a vague and misleading term which should be avoided. (pet peeve #1)
A nonclinical phrase which might apply numerous problems
- Arterial insufficiency
- Venous insufficiency
- Lymph edema
- Vasospasm
- Heart failure
- Decreased newspaper sales
- Inadequate social life
Ischemic ulcers
physical findings

- Pulse deficit
- Pale, cool, mottled
- Alopecia
- Black or dry ulcers lacking granulation tissue
- Usually a very distal location such as toes or the heel
It usually starts small....

Most ulcers are precipitated by a minor trauma, and then propagated by the underlying pathology.
Ischemic ulcers
Ischemic ulcers treatment

- Drain pus and debride any infected necrotic tissue immediately
- Objective assessment of arterial supply
- Non-invasive parameters which predict a capacity for primary healing
- Revascularization with a catheter-based or operative intervention
- Definitive wound care after revascularization
Ankle-Brachial Indices

- ABI = pLE/pBrachial
- Clinically useful Objective evaluation
- Easily performed with minimal equipment at the bedside
- May not identify proximal non-occlusive Dz
- “Falsely elevated” in calcified vessels
Ankle-brachial index

- ABI 0.9-1.2 essentially normal, expect healing
- ABI 0.5-0.9 c/w claudication, healing likely
- ABI 0.3-0.5 c/w resting ischemic pain, healing difficult but not impossible, revascularization sometimes needed
- ABI 0.0-0.3 spontaneous tissue necrosis a risk, ulcers require revascularization to heal