

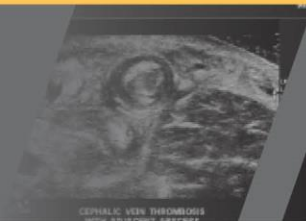
2024 MID-ATLANTIC CONFERENCE
12th ANNUAL CURRENT CONCEPTS IN
VASCULAR THERAPIES

2024



Hilton Virginia Beach Oceanfront
Virginia Beach, Virginia

APRIL 18-20



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Multidisciplinary

*Approach to
Limb Salvage*

The Diabetic
And

Dysvascular Limb



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The Colen Clinic



The Colen Clinic



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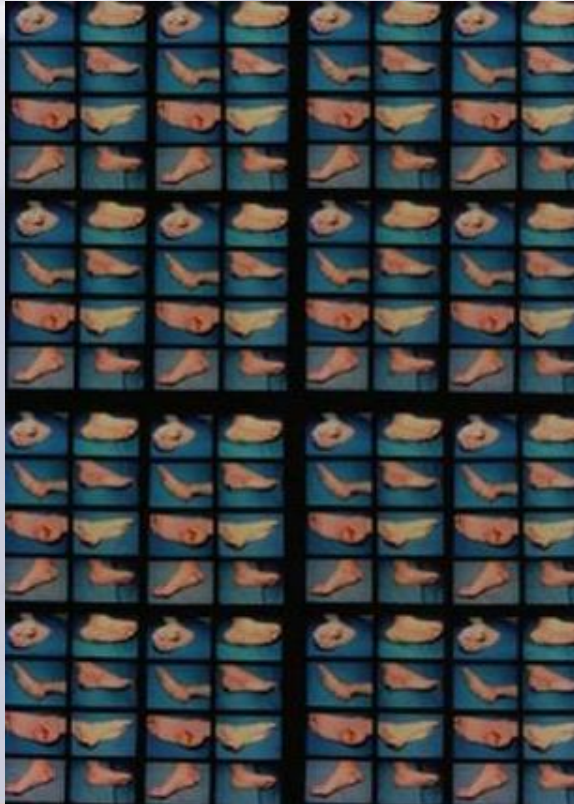
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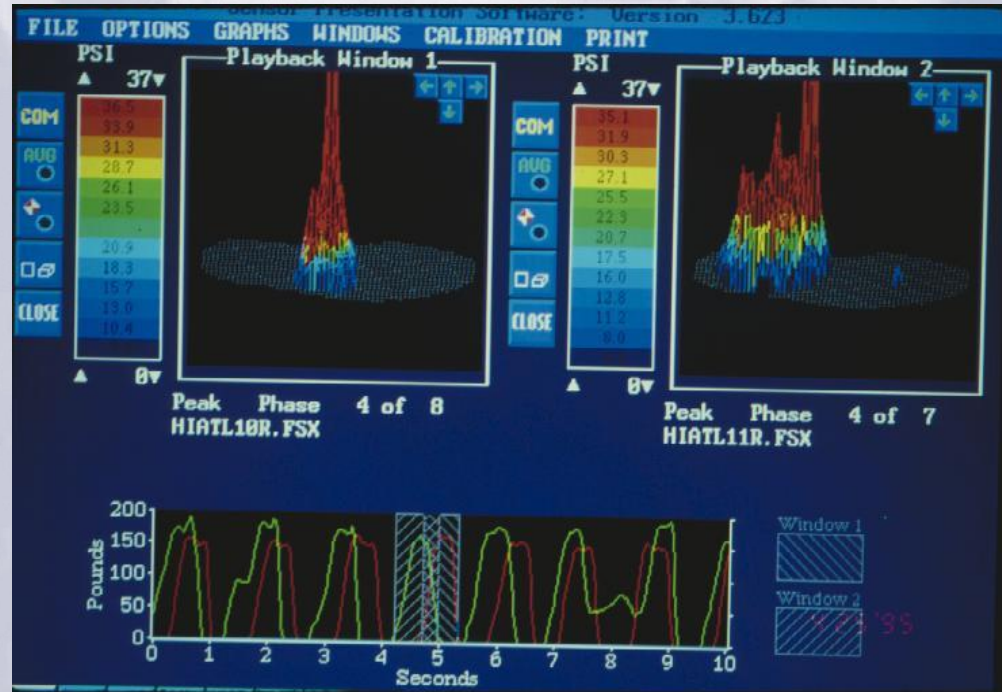
Patient Evaluation



- Physical Exam
- Radiologic Assessment
- Vascular Evaluation
- Neurological Evaluation
- Gait Evaluation

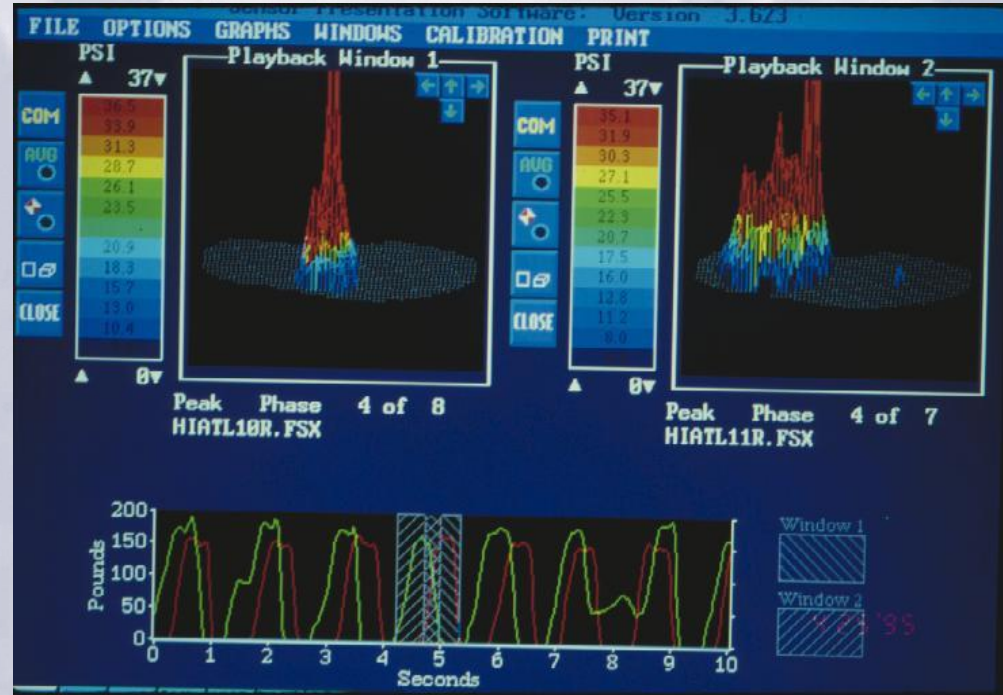
Gait Evaluation

- **F-Scan gait analysis**
 - Look for regions of excess pressure
 - Correlate with physical findings



Gait Evaluation

- F-Scan gait analysis
 - Helps determine need for osteotomy and/or tendon transfer surgery
 - May be repeated postoperatively to assess outcome



Goals of Reconstruction



- Bipedal ambulation
- Well vascularized foot
- Plantar-grade foot

Goals of Reconstruction

- Uniform weight distribution
- Limited amputations when possible
- Skin grafts for dorsal wounds
 - May need to excise extensor tendons

Forefoot

- Charcot forefoot deformities
- Sensory & autonomic neuropathy
- Tight Achilles' tendon
- *May be exacerbated by vascular disease*

Forefoot

<Adjunctive Procedures>

- Sesamoid resection (1st ray)
- Metatarsal osteotomy/ostectomy
- Hoffman procedure
- Achilles' tendon lengthening

Forefoot

<ray amputation>



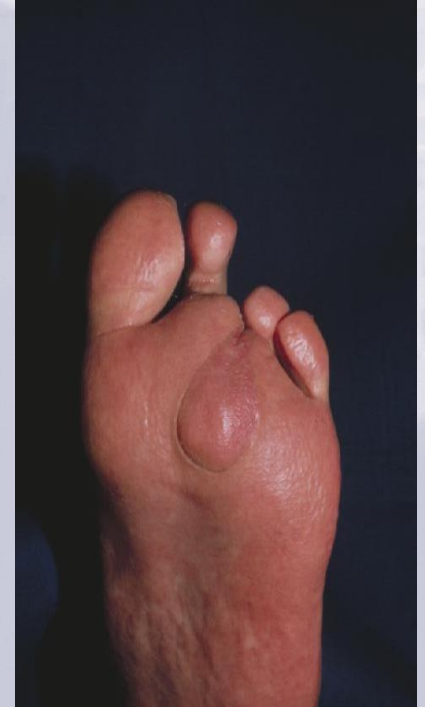
Forefoot

<Transmetatarsal amputation>



Forefoot

<toe filet flaps>



Forefoot

<neurovascular island flaps>



Forefoot

<V-Y advancement flaps>



Midfoot

- Severe midfoot Charcot
- Sensory & autonomic neuropathy
- Tight Achilles' tendon
- Guillotine midfoot amputations
- *May be exacerbated by vascular disease*

Midfoot

<adjunctive procedures>

- Osteotomy
- Midfoot fusion
- Achilles' tendon lengthening
- Tendon transfers for varus deformity

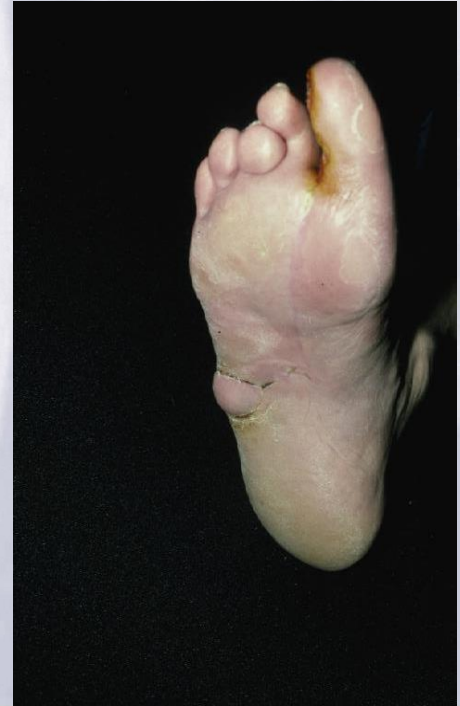
Midfoot

<*Lisfranc amputation*>



Midfoot

<Neurovascular island flaps>



Midfoot

<V-Y advancement island flaps>



Midfoot

<Amputation Salvage>



Midfoot

<Amputation Salvage>



Hindfoot

- Autonomic & sensory neuropathy
- Loss of Achilles' tendon function
 - Achilles' tendon rupture
 - Excessively lengthened Achilles' tendon
- Pressure ulceration (decubitus)
- *May be exacerbated by vascular disease*

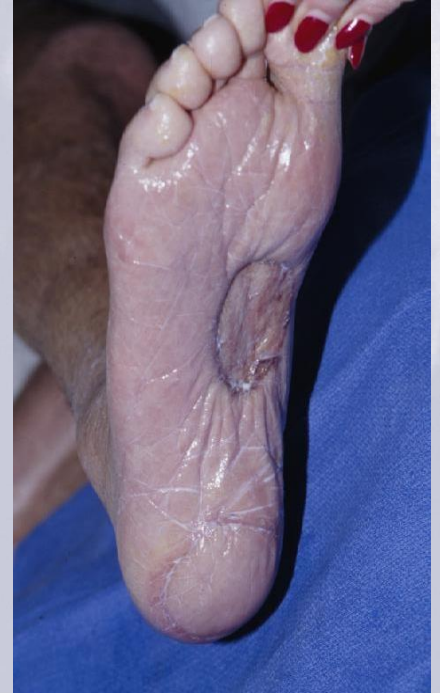
Hindfoot

<adjunctive techniques>

- Calcaneotomy
 - Can remove at least 40% of the calcaneus
 - Removes bony prominences
 - Simplifies wound closure in high-risk patients
- Avoid Achilles' tendon lengthening

Hindfoot

<instep island flap>



Hindfoot

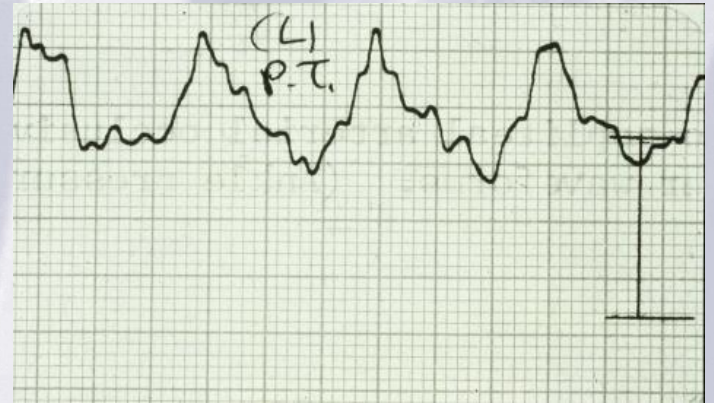
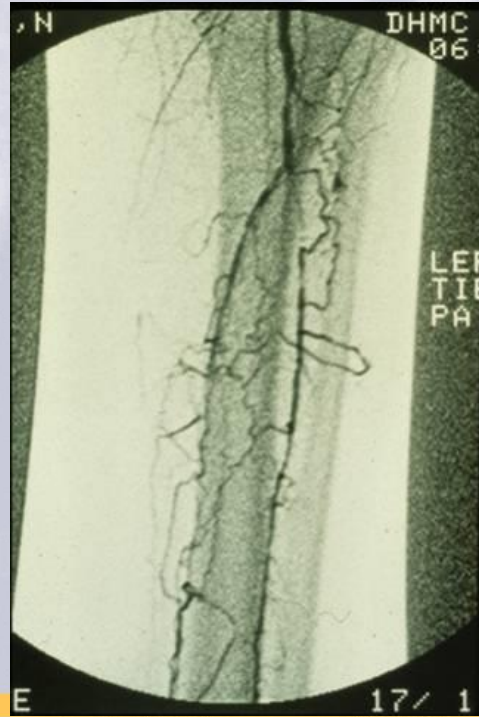
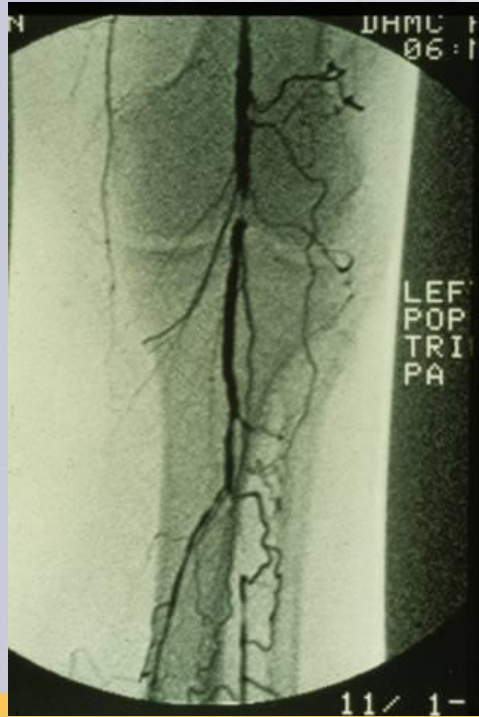
<free flap>



Diabetic patient with significant peripheral vascular disease

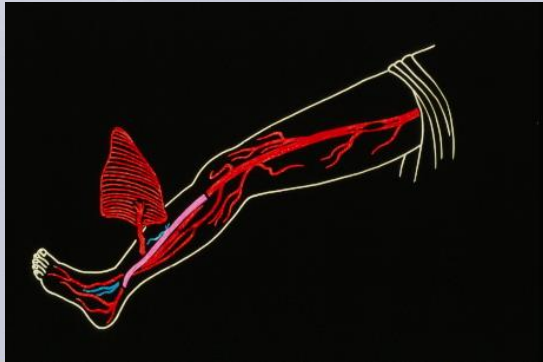
Hindfoot

<free flap>



Hindfoot

<free flap>



What we are trying to avoid



Management Scheme

- Stabilize medically
- Site specific reconstruction
- Multidisciplinary approach

Plastic Surgery

Vascular Surgery

Podiatry/Orthopedics

Cardiology

Infectious Disease

Endocrinology

Management Scheme

- Serial debridement
- Culture specific antibiotics
- Close wounds with **SIMPLE PROCEDURES** whenever possible
- Frequent follow-up

Thank You

