



Diabetic Foot Exam

SEED Year 2 Learning
Session 1

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Scope of the problem

- 16 million diabetics in US
- 86,000 LE amputations annually secondary to DM
- Diabetics have 20-50 times greater risk of amputation



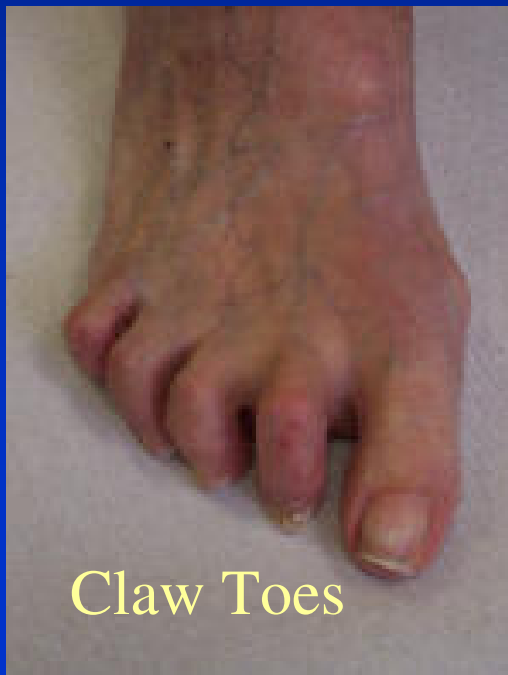
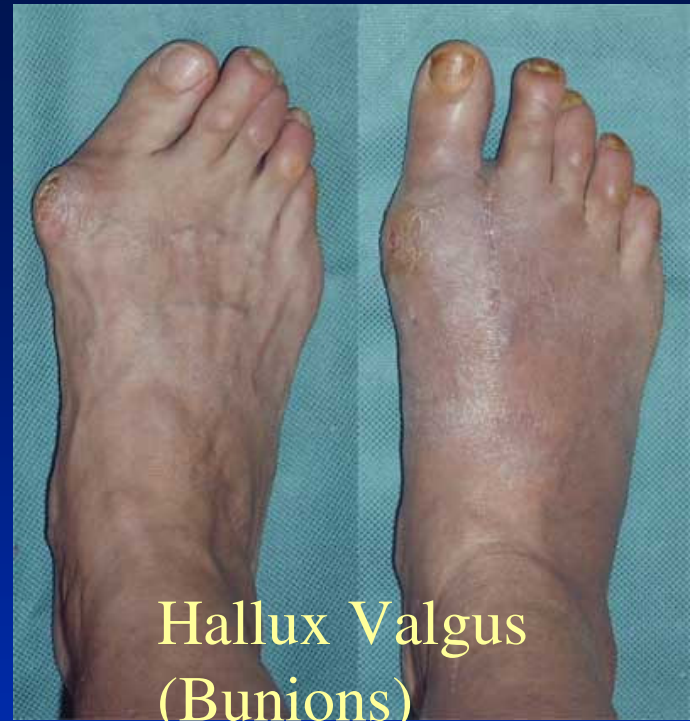
Scope of the problem

- Foot complications number one reason for hospitalization of DM
- 40% 5 year survival for diabetic LE amputees



What are you looking for?

- Neuropathy (monofilament exam)
- Peripheral vascular disease (pulses, visual inspection)
- Other lesions: bony deformities, fungus, ingrown nails, dry skin, callus, plantar warts, bunions, ulcers, infections





Callus



Color changes

Peripheral Neuropathy

- 58% of diabetics
- Damage to small nerves of the extremities leading to
 - Decreased sensation
 - Symptoms: burning, cold, pain, numbness
 - Increases risk for ulcers because patients are unaware of injuries

Peripheral Vascular Disease

- Damage to small blood vessels of extremities leading to
 - poor blood flow and wound healing
 - claudication (extremity pain with exertion)
 - thinned skin, hair loss

Why are you doing it?



Reduce the risk of ulcer and other complications by 50-80%

When & How I Did the Foot Exam

- Every diabetic patient had to remove their shoes and socks when they were roomed
- Placed a towelette on floor
- Visually inspected the top and bottom of feet and between the toes

What to Look For

- Skin Discoloration
- Ingrown/Fungal toenail
- Swelling of feet and/or ankles
- Open Sores
- Dry and Cracking Skin
- Corns or Calluses
- Appropriate Footwear



Foot Pulses

Dorsalis pedis pulse

- located on top of the foot
- Usually at the same spot on both feet



Foot Pulses

Tibialis posterior pulse

- located in the back of the ankle behind the medial malleolus

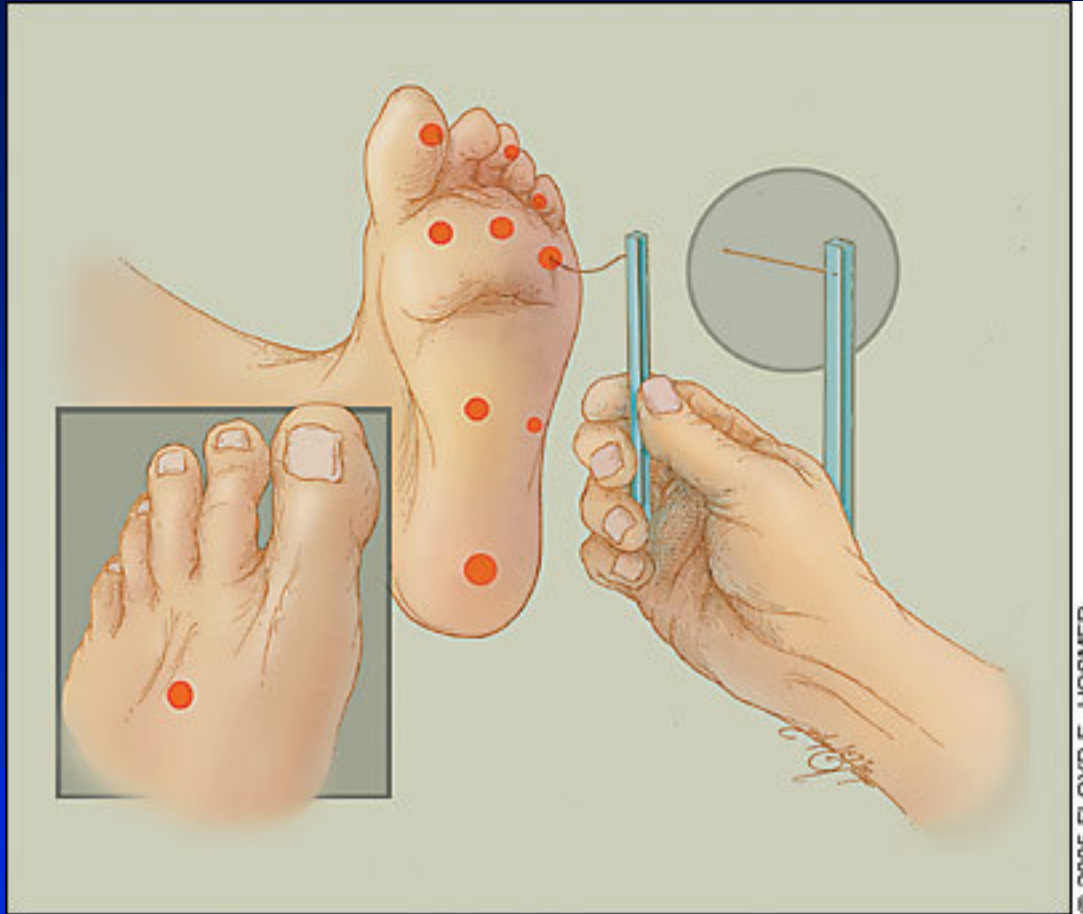


Foot Pulses, cont.

- Measured on a scale of 0-2+
- Keep patient's feet on the ground
- Sometimes difficult to find
- Keep your hand relaxed
- Don't use your thumb

How I did Monofilament Test

- Poke myself and patient's arm with monofilament to reassure patient that it will not hurt
- Patient closes eyes and say "Yes" every time they feel the monofilament
- Vary timing and order of testing points



D Armstrong et al. AAFP, Vol. 57/No. 6 (March 15, 1998)

Patient education during the exam

- Diabetes can slow healing process
- Minor cuts can become more serious
- Can develop infections that can lead to:
 - Loss of circulation
 - Loss of feeling (nerve damage)
 - Gangrene
 - Amputation

Patient education during the exam

- Patients can use a floor mirror at home



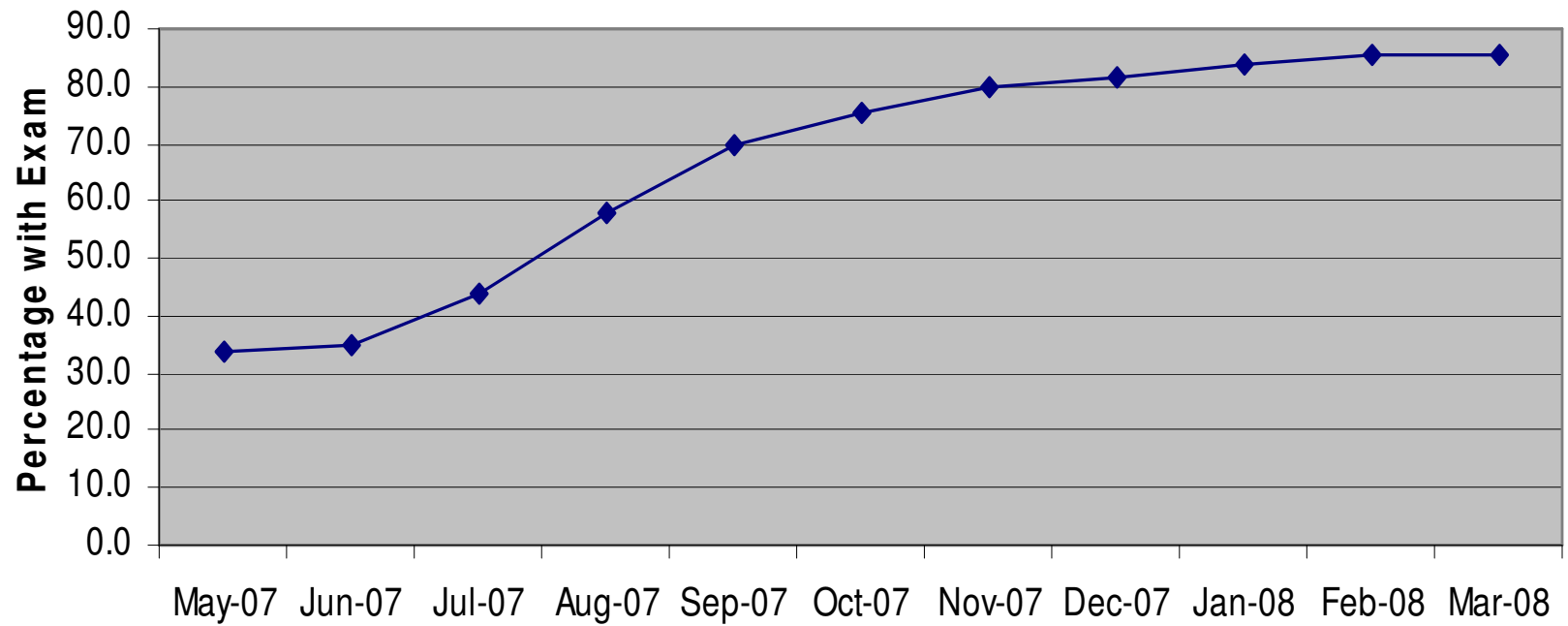
Monofilament exam, cont.

- Monofilaments should not be used to test more than ten patients in one session and should be left for at least 24 hours to "recover" (buckling strength) between sessions.
- Ordering info:
<http://ndep.nih.gov/resources/feet/resource.htm>

Monofilament exam, cont.

- Classify foot risk as:
 - 0- no loss of protective sensation in feet
 - 1- loss of protective sensation in feet
 - 2- loss of protective sensation in feet with high pressure (callous/deformity), or poor circulation.
 - 3- history of plantar ulceration or neuropathic fracture.

Foot Exam Rates



feets don't fail me...

NOW



