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Early treatment Options in Diabetes: Foot Care.

Presentation and Workshop

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in Podiatry

“The tidal wave of Diabetes Prevention vs. Complications”
6th Nov 2013
FERA Lakeside conference centre, York.

Inspiring tomorrow’s professionals
Aim of the session

- The diabetic foot – what do we know?
- Foot morphology
- Discuss determinants of gait
- What are the gait changes for people with diabetes?
- Treatments to prevent and manage active foot ulcers.
- Practical session on manufacturing orthotics.

Inspiring tomorrow’s professionals
The diabetic foot – what do we know?

- DH (NICE clinical guidelines) Cg10 basic foot check should include assessment of:
  - Vascular
  - Neurological
  - Foot Deformity
  - Footwear
Foot Morphology
Can we look at your foot shapes?

- Flat foot
- High arched foot
- Toe deformities
- Hallux abducto valgus

• Insert images
Normal foot and walking (gait)

- What should the foot do in walking (gait)?
- How does it do it?
- Why does it do it?

http://www.youtube.com/watch?v=GV6CAZiv5Zo
http://www.youtube.com/watch?v=9ZlBUglE6Hc

- Normal determinants of gait
- Pelvic tilt, rotation, knee flexion, ankle mechanism, foot mechanisms.
Are there gait changes in diabetes?

Yes,

- Peripheral Neurological changes
- Muscle atrophy
- Joint immobility

- Gait and balance are altered in diabetic patients increasing falls risk. Exercises can help improve coordination and increase strength. Allett (2009)
Are there foot changes in diabetes?

- Yes
- Formosa (2013) recently highlighted the importance of biomechanical assessment of foot deformity and joint mobility in TD2.

- Foot deformities are predictive of foot ulcerations in the diabetic foot due to increased pressure areas.
Is it just deformity that creates abnormal pressure?

How can we reduce the pressure here?
How can we shift the pressure off the foot? … Simple as 1,2,3


2) Offloading pressure – Armstrong (2005) removable and irremovable cast walkers to heal DFU

   Demonstrated how orthotics can reduce Pressure over the metatarsal heads.
foot wear, offloading and orthotics
The role of orthotics for diabetes

**The person**

i. Foot Morphology

ii. Gait

iii. Deformity

iv. Footwear

**The orthotic**

(material property)

i. Decelerate pressure

(cushion)

ii. Redistribute pressure

(offload)

iii. Functional correction

(change the gait)
Let’s Create an insole

Groups of 4/5
Minimum 1 volunteer
Take an insole
Fit to a shoe

• Add some materials.
• Put it in your shoe.
• Walk!
Checklist of Trigger factors for offloading treatment

- History of foot ulceration
- Foot Morphology creating a risk
- Gait disturbances
- Deformity creating a risk
- Footwear not fit for purpose

If the answer is yes….Consider referral to a podiatrist for offloading treatment.
References


