Medical devices used in the Diabetic Foot from Prevention to Advance Wound Care

Graham Bowen
Head of Podiatry
Challenges

● 135 diabetes related amputations per week in England

● Diabetic foot disease is a significant cost to the NHS: estimated at £800 million – Marion Kerr 2012

● Are the right people using the right medical device in managing Diabetic foot disease?

● Is there timely access to a dedicated Diabetic Foot / At Risk Foot team
Medical Devices used in establishing foot risk
Identifying Foot Risk

Acute & High Risk: 13%

Increased: 27%

Low Risk: 60%
Opportunities of the use of Medical devices

- Skin care
- Devices for off loading:
  - Orthotics / insoles
  - Bespoke footwear
  - Total Contact Casting
- Devices for self management
Opportunities of the use of Medical devices

- Instruments
- Dressings
- Off loading
Opportunities of the use of Medical devices

- Instruments
- Dressings
- Off Loading
Opportunities of the use of Medical devices
Which Medical device to use?

Challenges
- Time?
- Cost?
- Outcome?
- Patient expectation / concerns
Diabetic Foot Ulceration

Person with a Chronic Ulcer

- Treat the cause
- Patient-centred concerns

Local wound care

- Tissue non-viable
- Inflammation / Infection
- Moisture balance

Edge of wound

Sibbald et al. 2003
Preparing the Wound Bed
Which Medical device to use?

- Dressings?
- Scalpel?
- Larvae?
- Versajet?
Which Medical device to use?

- Dressings?
- Scalpel?
- Larvae?
- Versajet?
Which Medical device to use?

- Dressings?
- Scalpel?
- Larvae?
- Versajet?
Which Medical device to use?

VERS AJET*
Hydrosurgery System
Which Medical device to use?
Which Medical device to use?
Negative Pressure Wound Therapy
Outcome – to keep the foot healed

- Re-ulceration
- Footwear
- Skin care
- Monitoring
TCC-EZ : INNOVATION
135 diabetes related amputations per week in England

Average of 59,000 active foot ulcerations at any one time in England (Diabetes UK 2015)

Comparative annual mortality rates 5 years post-incidence (Pattie, 2012)
## Local Amputation Rates

### Major Amputation / 1000 people with diabetes

<table>
<thead>
<tr>
<th>CCG</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Trend</th>
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<td>Fareham and Gosport CCG</td>
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<td>England</td>
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### Colour coding

- Red - worse than England
- Amber - similar to England
- Green - better than England

### Minor Amputation / 1000 people with diabetes

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Summary

- Prevention is key in diabetic foot disease
- Keeping the foot intact will prevent amputations
- Using medical devices can resolving ulceration quickly
- Off-Loading is an area for improvement
- Medical devices are widely used in the management of Diabetic foot
- Medical devices can range form inexpensive to expensive however the clinical outcomes are significant when the right medical device is used
Thank you!

Any Questions?