CONNECTIVE ISSUES 2014
Pressure Injury Case Study
Outline

- Medical History
- Social History
- Patient Assessment
- Lower Limb Assessment
- Factor affecting healing and goals setting
- Progress of the wound and reviewing goals
- What I learnt from this case
Medical History

- Mario*: 65 year old man
- Coronary artery disease
  - Bisoprolol, Frusid, Astrix
- Coronary Artery Bypass Graft (August 2010)
- Depression
  - Endep
- Hypertension, Hyperlidaemia
  - Coversyl, Liptor
- Type 2 Diabetes (10 year duration)
  - HbA1C 8.1%
  - Diabex
- Other
Psychosocial environment

- Low mood
- Home supports
  - Retired, lives with supportive wife
- Access to services
  - Metro area, close to hospital
  - Community Bus
Patient Assessment

- Mobility
- Nutrition
- Pain
  - 4/10 VAS in wound, intermittent, background
  - Severe right calf pain when walking +30 seconds
Wound History

- 3 week duration
- During hospital stay post CABG surgery
- “Clear gel” dressing in situ
Lower limb assessment: Peripheral Arterial

- Intermittent claudication at 10 metres
  - Edinburgh Claudication Questionnaire (Leng, 1992)
- Pedal pulses
  - Right – Absent   Left – Normal
- Audible doppler
  - Right – Monophasic with faint volume
- Ankle Brachial Index
  - Right – 0.59   Left – 0.94
- Toe pressure
  - Right – 20mmHg   Left – 100mmHg

**Conclusion:** Severe peripheral arterial disease (International Diabetes Federation (IDF), 2011; Marston et al. 2005; Norgren et al. 2007)
Lower limb assessment

- Peripheral neurological
  - 10g monofilament present

- Footwear
  - Lace up runners
Factors affecting healing and goal setting

<table>
<thead>
<tr>
<th>Significant factors affecting healing</th>
<th>Goals of therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td>Reduce heel pressure</td>
</tr>
<tr>
<td>Peripheral Arterial Disease</td>
<td>Improve peripheral blood flow</td>
</tr>
<tr>
<td>Hyperglycaemia</td>
<td>Optimise glycaemic management</td>
</tr>
<tr>
<td>Local wound conditions</td>
<td>Appropriate local wound care</td>
</tr>
</tbody>
</table>

Other Factors to Consider

- Wound pain
- Nutrition
- Psychosocial aspects
- Infection?
- Assessment and management of other co-morbidities
## Heel pressure

<table>
<thead>
<tr>
<th>Factor affecting healing</th>
<th>Goals of therapy</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heel pressure</td>
<td>Offload heel in line with best practice standards</td>
<td>MPO, SPS</td>
</tr>
</tbody>
</table>

(National Pressure Ulcer Advisor Panel (NPUAP), 2007)

Image from: OAPL (2011)
## Peripheral Arterial Disease

<table>
<thead>
<tr>
<th>Factor affecting healing</th>
<th>Goals of therapy</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripheral arterial disease</td>
<td>Improve blood flow</td>
<td>Vascular Surgery Revascularisation</td>
</tr>
</tbody>
</table>

(Marston et al. 2005; Norgren et al., 2007)
# Hyperglycaemia

<table>
<thead>
<tr>
<th>Factor affecting healing</th>
<th>Goals of therapy</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyperglycaemia</td>
<td>Optimise glycaemic management</td>
<td>Diabetes Educator</td>
</tr>
</tbody>
</table>

(Colagiuri, Girgis, Eigenmann, Gomex, & Griffits, 2009; UK Prospective Diabetes Study Group, 1998)
Other Factors to Consider

- **Nutrition** (Brown & Phillips, 2010)
- **Wound pain** (Cole-King & Harding, 2001; Solowiej, Mason, & Upton, 2009, WHO 1990)
- **Psychosocial impact** (Finestone, Alfeeli, & Fisher, 2008; Vileikyte, Rubin, & Leventhal, 2004)
- **Monitor contral-lateral side, risk of other pressure injuries** (IDF, 2011; NPUAP, 2009)
- **Management of other co-morbidities** (Nogren, et al. 2007)
- **Infection?** (Lipsky, 2004)
## Wound bed conditions

<table>
<thead>
<tr>
<th>Tissue</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>95% dry necrotic 5% sloughy</td>
<td>Unstageable pressure injury with infecion</td>
</tr>
</tbody>
</table>

## Goals of therapy

<table>
<thead>
<tr>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevent deterioration and wet gangrene Improve peri wound</td>
</tr>
<tr>
<td>Betadine and Allevyn dressing Daily moisturiser to surrounding skin</td>
</tr>
</tbody>
</table>

(Original text: European Wound Management Association (EWMA), 2004)
### What’s New?
Has had revascularisation and has good arterial potential for wound healing now with palpable pedal pulses and a toe pressure of 110mmHg

<table>
<thead>
<tr>
<th>Wound bed conditions</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tissue</td>
<td>100% necrotic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goals of therapy</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove devitalised tissue</td>
<td>Intrasite and Allevyn</td>
</tr>
<tr>
<td>Moist wound healing</td>
<td>(EWMA, 2004; NPUAP, 2009; Schultz et al., 2003; Sussman, 2007)</td>
</tr>
<tr>
<td>Wound bed conditions</td>
<td>Classification</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Tissue</td>
<td>100% tenacious slough</td>
</tr>
</tbody>
</table>

**Goals of therapy**

| Debride slough | Iodosorb Paste, Allevyn |

<table>
<thead>
<tr>
<th>Wound bed conditions</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goals of therapy</strong></td>
<td><strong>Intervention</strong></td>
</tr>
<tr>
<td>Encourage granulation, epithelisation</td>
<td>Aquacel, Allevyn</td>
</tr>
<tr>
<td>Protect peri wound</td>
<td></td>
</tr>
</tbody>
</table>

(EWMA, 2004; NPUAP, 2009; Schultz et al., 2003; Sussman, 2007)
### Goals of therapy

<table>
<thead>
<tr>
<th>Improve skin integrity</th>
<th>Daily emollient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevent injury recurrence</td>
<td>Education, regular Podiatry follow up</td>
</tr>
</tbody>
</table>

(IDF, 2011)
References


References


References

