Workshop: Palliative Wound Care
EWMA Conference, Copenhagen

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Content

• Background
• Integrative approach of palliative wound care
• Psychological impact of palliative wounds
• Symptom management
• Local wound management
• Practical example
Background information

• Palliative care often is associated with end of life.
• Palliative care does not always indicate end of life
  – It extends across the care continuum and can be used in conjunction with curative treatment.
• Related concepts include end-of-life wound care, hospice care, and symptom management.
• Palliative wound care may be implemented in order to reduce suffering from wound-related symptoms and improve quality of life.

Background information

• Definition of palliative wound care according to the WHO (1989)
  The goal of palliative care is to promote the quality of life, being supportive by focusing on managing and controlling patients' symptoms to achieve the best possible quality of life for patients and their families, neither hastening nor postponing death.
Integrative approach of palliative wound care

- Symptom management
- Psycho-social Well-being
- Patient / Family Goals
- Multi-disciplinary team

Psychological impact of palliative wounds

• Embarrassment
  – western culture puts pressure on individuals to appear flawless and attractive
  – malfunction of the body
  – wound is incompatible with this cultural expectancy
  – negative effect on the psychosocial wellbeing of individuals
  – ‘...acceptance of the situation’

Psychological impact of palliative wounds

“It was festering like a running nose. I had to wash my clothes all the time. Well I changed four to six times a day. That was so labour intensive. Well, so I decided to expose my breast to the air and waited until it dried up a bit.”

(Probst et al. 2013)
# Psychological impact of palliative wounds

<table>
<thead>
<tr>
<th>malodour</th>
<th>pain</th>
<th>exudate</th>
<th>bleeding</th>
<th>wound dressing</th>
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<tbody>
<tr>
<td>Embarrassment</td>
<td>Fear of pain</td>
<td>Embarrassment</td>
<td>Embarrassment</td>
<td>Embarrassment</td>
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<tr>
<td>Shame</td>
<td>Depression</td>
<td>Fear of leakage</td>
<td>Fear of bleeding</td>
<td>Body image alteration</td>
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<td>Revulsion or disgust</td>
<td>Social isolation</td>
<td>Shame</td>
<td>Depression</td>
<td>Restriction</td>
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<tr>
<td>Depression</td>
<td>Sexuality</td>
<td>Depression</td>
<td>Social isolation</td>
<td>Cosmetic appearance of dressing</td>
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<td>Social isolation</td>
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<td>Sexuality</td>
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(Fry, R. 2013)
Psychological impact of palliative wounds

• Malodour
  – worst physical symptom
  – smell of rotting flesh and bad hygiene
    → increased sense of embarrassment, shame, repulsion, depression and socially exclusion.

• Pain
  – psychological pain, is not seen or cannot be managed with analgesia
    → mostly associated with fear, anxiety, depression and social isolation.

Psychological impact of palliative wounds

• Exudate
  – uncertainty and unpredictability $\rightarrow$ fear of leakage; embarrassment and social isolation
  – “living in a body that cannot be trusted” stigma and revulsion attached to palliative wounds $\rightarrow$ body fluids should be contained within the body $\rightarrow$ individuals are further isolated from society

• Bleeding
  – bleeding can bring uncertainty and psychosocial distress
  – Frequency of dressing change can change and affect the lived experience.

(Probst, 2013; Alexander 2010; Piggin and Jones 2009)
Local wound management

Dr Patricia Grocott
Reader in Palliative Wound Care
King’s College London
Local wound management

Overlaps with Psycho-Social Well Being and Symptom Management

Palliative Treatments

- Surgery
- Radiotherapy
- Chemotherapy
- Electrochemotherapy: an anticancer drug is injected into a vein or directly into a tumour. Short, powerful pulses of electricity are applied to the tumour. The electrical energy opens the cell membranes allowing the anticancer drug to pass into the cells and exert a powerful cytotoxic effect – (http://guidance.nice.org.uk/IPG446)

Wound care devices

- Barrier products
- Debriding agents
- Dressings
- Bandages
- Wound management devices; stoma bags; Topical Negative Pressure devices
Theoretical frameworks to guide wound care

• Moist wound healing
• Wound bed preparation
• ‘Dry’ wound management
Dry wound management for palliative care patients

- To manage the wound in a dry state building a natural scab
  - Superficial skin tears, lacerations, burns, grazes
  - Wounds that are difficult to dress with conventional dressings because of the location
  - Advanced wounds that are covered in scab and the patient has a short life expectancy

- Methods: use of astringent antiseptics e.g. Potassium Permanganate; over the counter YOUKI
Wound Bed Preparation

- Restore blood flow
- Bacterial balance
- Manage necrosis (debridement)
- Manage exudate
- Correct cellular dysfunction
- Restore biochemical balance

Palliative Wound Care

- Restore or block blood flow
- Debride dead tissue or preserve eschar
- Manage bacterial overload and odour
- Manage exudate:
  - Remove excess fluid
  - Prevent peri-wound excoriation
  - Prevent peri-wound maceration
  - Prevent soiling
- Curb frequency of dressing changes and nurse visits
How can we manage these wounds with conventional products?
Accumulation of fluid under absorbent dressings
Woundcare for Epidermolysis Bullosa
WEB Purpose and Background

• **Aim:** to enable people with EB, their carers and clinicians to *co-design* wound care products to meet their needs

• EB is an inherited disorder causing extensive, repetitive painful skin blistering and wounds; some forms lead to aggressive fungating squamous cell carcinomas

• It is rare, (300,000 patients worldwide) but it incurs high costs (up to £50,000 per month on products alone for one patient)
Identification of patients’ needs

• Experienced based co design\(^1\): the patient experiences are turned into design solutions
• Purposeful samples (6-20 per workshop) of adults with EB, carers, clinical nurse specialists participated in four audio-recorded workshops, to elicit their experiences of wound dressings
• Participant observations of dressing changes by King’s researchers
• Thematic data analysis\(^2\)


WEB New Design Concepts and Surrogate Testing

- Two layer system: reusable dressing retention garment + primary disposable dressing
  
  *not novel but the moisture loss function and particular designs are novel*

- Retention garments to replace bandages refined iteratively with manufacturer using surrogate testing³

- CE marked as Class 1 medical devices

- UK NHS Drug Tariff as of May 1st 2013

WEB Project Summary

• Reusable dressing retention garment, co-designed with people with EB, carers, clinicians (black and natural)

• N-of-1 study findings demonstrate clinically significant improvements in dressing stability

• Savings of an average of £10,000 per patient per annum (time and products) by replacing disposable bandages with reusable garments

• A novel primary disposable dressing is under development and other patient groups will be included⁴

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The Symptom of odour

Dr. Georgina Gethin
Senior Lecturer
School of Nursing and Midwifery
National University of Ireland, Galway
Smell – just what is it?

Odour is the property of a substance that activates the human sense of smell.

The human olfactory system is a sensory system used for the detection of odours. It is highly sensitive and as such is capable of detecting extremely low concentrations (fractions of a part per billion) of a wide range of odorous chemicals.

EPA 2011 www.epa.ie
Causes

A combination of factors including bacteria, necrotic tissue, high levels of exudate and poorly vascularised tissue.

Volatile agents that includes short chain organic acids, (n-butyric, n-valeric, n-caproic, n-haptanoic and n-caprylic) produced by anaerobic bacteria together with a mixture of amines and diamines such as cadaverine and putrescine that are produced by the metabolic processes of other proteolytic bacteria.

*This odour has been linked to the smell of rotting meat.*

*(Moss et al, 1974), (Thomas et al, 1998).*
Causes

More recently Dimethyl Trisulfide has been identified in malignant wounds as a source of odour.

This compound has also been found in volatiles emitted from certain vegetables, fermented milk and aged food or drinks and is also produced by aerobes such as *Pseudomonas aeruginosa*. Must also consider inappropriate management as a causative agent.

*(Shirasu et al. 2009)*.
You can’t see it
You can’t measure it
You can’t touch it.
You can taste it!
Extent of the Problem

- Wounds effect up to 7 million patients worldwide.
- 80% of patients and staff cite odour as the worst part of a wound. *Gethin et al 2013 (submitted for publication)*
- Not identified as a priority for wound management. *Cowman et al 2012.*
- Research base to support current practice is small and old.
- Some new developments in dressings with charcoal to manage this.
- Need to look to environmental agencies for assistance.
‘Odour sensing olfactory cells are linked to areas of the brain that control emotions and memory processes. Offensive odours can therefore have impacts on the health and well-being of humans, especially if one is subjected to the odour for extended periods of time. At sufficiently high concentrations odorous compounds may have a direct effect on human health. Also, an individual’s health may suffer indirectly due to stress associated with odour’.
EPA – environmental odour Impacts

- Vomit
- Headaches,
- Nausea,
- Stress, anxiety, frustration,
- Having to leave home and stay with family/friends or incur the expense of a hotel,
- Unwilling to host guests due to embarrassment,
- Children unable to sleep due to odour in bedrooms,
- An additional discomfort for infirm elderly people.
- Complainants can experience on-going anxiety and stress due to the potential for reoccurrence of odour at any time.
- This can happen to people when they are frequently subjected to nuisance odours.
Levels of sensitivity to odour within a population will vary. Consequently, the perceived offensiveness of an odour will vary from person to person.

The context in which the odour occurs will affect the *nuisance value* of the odour.

For example, an odour detected during a special occasion or during a period of illness may cause more nuisance than the same odour detected on another day.
Assessment techniques

- IRR of wound odour 0.2  
  (Gethin and Cowman, 2008)
- VAS 0-10. 0 = no odour; 10 = worst possible odour.
  - May be assessed by the patient or the clinician or both.
  - Frequently used throughout the literature.
- Baker and Haig Scale, 1981.
  - Strong, moderate, no odour
- TELER system (Grocott, 2001)
# Method of Assessment

(12% of people assess odour)

<table>
<thead>
<tr>
<th>Method Description</th>
<th>Count</th>
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</thead>
<tbody>
<tr>
<td>Scale (type not stated)</td>
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</tr>
<tr>
<td>Presence or absence of odor</td>
<td>29</td>
</tr>
<tr>
<td>3 point scale</td>
<td>11</td>
</tr>
<tr>
<td>4 point scale</td>
<td>10</td>
</tr>
<tr>
<td>10 point scale</td>
<td>2</td>
</tr>
<tr>
<td>TELER score</td>
<td>4</td>
</tr>
<tr>
<td>Distance from wound at which odor is present</td>
<td>6</td>
</tr>
<tr>
<td>Descriptively using words</td>
<td>63</td>
</tr>
<tr>
<td>Local policy</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>49</td>
</tr>
</tbody>
</table>
There are five elements that are regarded as combining to cause the odour nuisance experience, they are:

- Frequency,
- Intensity,
- Duration,
- Offensiveness,
- Location.
Management Options – to the wound

- 74% combine dressings, most frequent:
  - Hydrofibre + some antimicrobial – silver, honey.
  - Flagyl + range of other options.
  - Honey + foam or alginates.
- 8% apply aromatherapy direct to the wound.
Metronidazole

• Trade name flygyl.
  – Crushed and used as an irritant or in a gel or soaked in gauze.
  – Applied topically – direct to wound surface.
  – Usually daily application.
  – Some studies have reported positive outcomes when used in MFW.
  – Needs secondary dressing.
  – Frequency of application depends on efficacy and exudate levels
Honey

- Medical grade honey eg. Medihoney, Activon.
- Applied topically as a gel or as a dressing.
- Antimicrobial properties
- Anti-inflammatory properties
- Widespread reports of efficacy against malodour in MFW and other wounds. Often reported as a secondary outcome.
- Frequency of change dependent on exudate levels.
- Secondary dressing required
Charcoal

- Absorbs toxins.
- Dressings with charcoal and absorbent layers seem to work best.
- Eg. Actisorb, Carboflex
- May or may not require secondary dressing.
- Difficulties encountered in gaining a wound seal.
Iodine

- Antimicrobial properties.
- Iodosorb effective in other wound types.
- Has antimicrobial properties and absorbency.
- Frequency of application depends on exudate levels.
Tea Bags

- Preliminary studies to suggest green tea bags.
- Applied as secondary dressings.
- Absorbs exudate and odour.
<table>
<thead>
<tr>
<th>Agent</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat Litter</td>
<td>Odour Absorption</td>
</tr>
<tr>
<td>Charcoal coals</td>
<td>Odour Absorption</td>
</tr>
<tr>
<td>Room Deodorisers</td>
<td>Adour adsorption and odour masking</td>
</tr>
<tr>
<td>Aromatherapy oils</td>
<td>Odour masking</td>
</tr>
<tr>
<td>Eucalyptus, Clove oil</td>
<td></td>
</tr>
<tr>
<td>Dried sage</td>
<td></td>
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<tr>
<td>Aceto Balsamico</td>
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Thank you