Wounds UK debate: dressing choice — what's the X Factor?

'The debate aimed to answer questions around the criteria for selecting dressing products'

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In November 2011, the Wounds UK Harrogate conference hosted the inaugural Wounds UK debate, which focused on the subject of dressings and how exactly clinicians are supposed to make the right choices for patients, especially when confronted with the plethora of new dressings and techniques available to today's wound care specialist.

The debate aimed to find some answers to questions around what criteria to use when deciding on the suitability of particular dressing products. For example, does clinical need override cost, or should clinicians be guided purely by what is listed on the hospital formulary? The aim was to use an expert panel, a little like the popular TV show, to find the 'X Factor' of dressing choice.

FORMAT

The debate took place in the main auditorium at Harrogate International Conference Centre and was chaired by David Leaper, Emeritus Professor of Surgery, University of Newcastle upon Tyne.

The expert panel was specifically chosen to reflect a wide range of views and was made up of the following key opinion leaders in wound care:

- Karen Ousey, Reader in Advancing Clinical Practice, University of Huddersfield
- Julian Guest, Visiting Professor of Health Economics, Kings College, London and Director, Catalyst Health Economics Consultants, Northwood, Middlesex
- Carol Roberts, Pharmacy and Prescribing Lead, East of England SHA
- Simon Barrett, Tissue Viability Nurse, East Riding of Yorkshire PCT.

The format of the debate was chosen to enhance audience engagement and to highlight the real problems of choosing the right dressing. Each member of the audience was given a red and a green card, which were to be used at the end of each presentation to rate the persuasiveness of each speaker — green indicated that the audience member agreed with the panel member's proposals; red that they disagreed. At the end of the debate, the card scheme was used again to choose and overall 'winner'.

SETTING THE SCENE

David Leaper chaired the debate and started off by looking at the range of competing interests that are available to the clinician when it comes to dressing choice, such as patient need, the clinical picture (e.g. the level of exudate/ infection), cost of a particular dressing versus other treatments, what is available on the formulary and the use of evidence-

David Leaper opening the debate.

Delegates vote in the Wounds UK debate on dressing choice.

> **'Choice is problematic in times of economic hardship when there are so many innovative products around'**

based practice. All of these methods have merits, but, how is the clinician supposed to choose?

Professor Leaper highlighted that this choice is especially problematic in times of economic hardship when there are so many innovative and new products around, such as portable negative pressure, silver dressings, honey or matrices.

Professor Leaper added that large tranches of academia are dedicated to helping clinicians decide exactly what they should do when confronted with a wound and he examined some of the key points of evidence and research in the development of modern wound care, starting with George Winter's theory of moist wound healing (Winter, 1962), which he highlighted has passed into wound care lore even though the original research featured pigs rather than humans!

Professor Leaper also highlighted Terry Turner's work identifying the characteristics of the ideal surgical dressing, including (Leaper, 2006):

- Absorbent and removes excess exudate
- Provides moist environment (auto-debridement)
- Does not add any foreign body to the wound
- Avoids 'strikethrough'
- Maintains skin temperature and gaseous exchange
- Permits pain free and atraumatic changes
- Cost effective
- Aids in control of bioburden (antiseptics).

Professor Leaper then discussed the work of David Sackett in evidence-based medicine (Sackett, 1996), which highlighted:

- Conscientious, explicit, and judicious use of current best evidence in making decisions about care of individual patients
- Integrating individual clinical expertise with the best external evidence from systematic research.

Dr Sackett believed that choice in best practice relied on evidence, expertise, and listening to the patient.

THE DEBATE

The debate sought to represent each method for choosing dressings with the panellists agreeing to support the following areas:

- Simon Barrett — symptom control (quality of life)
- Karen Ousey — evidence-based care
- Carol Roberts — cost and using formularies
- Julian Guest — health economics.

Simon Barrett: symptom control

Simon Barrett spoke on the side of symptom control being the most efficient marker for wound dressing choice.

He highlighted that the ideal dressing should:

- Maintain a moist wound environment, allowing excess fluid to be removed from the wound bed, without causing strikethrough to the outer dressing
- Act as a barrier to micro-organisms, managing bacterial burden where required and controlling odour
- Be non-adherent, easy to apply and remove without trauma
- Be non-toxic, non-allergenic and non-sensitising
- Be user-friendly to patient, clinician and the Trust in a cost – and quality – effective manner.

Barrett showed the audience a set of patient photos to demonstrate that you cannot always put a price on wound care treatment plans as they should remain individual to the patients specific needs *(Figures 1–3)*.

For Barrett, the choice of dressing involves far more that simply the cost of the dressing — quality of life outcomes and service provision implications are also vital. At this early stage of the proceedings, Barrett's theory that optimum dressing choice should be decided by the patient's symptoms, received an enthusiastic response, with a large show of green cards.

Karen Ousey: evidence-based practice

Karen Ousey spoke next and although she agreed with Barrett that optimum dressing choice should be decided by the patient's symptoms, she argued that without an understanding of the underpinning research and evidence to support dressing choices, there was potential for inappropriate choices to be made.

She highlighted that although there were limited randomised controlled trials in the area of wound care there was an abundance of case studies and suggested that these clearly exemplified the effectiveness of a range of dressings on a variety of wound types. She recognised that while case studies were not seen as being 'gold standard' in the hierarchy of research, they should not be dismissed, but rather seen as good forms of evidence. In fact, she referred to Sackett et al (1996) who identified that the practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research.

'While case studies may not be considered Gold Standard, they should not be dismissed, but rather seen as good forms of evidence'

Ousey proceeded to discuss and explore the importance of effective assessment, planning, implementation and evaluation of dressing procedures and asked the audience who generally undertakes this important role:

- Registered or non registered practitioners?
- Nurses or medical staff?
- Generalist or specialist nurses?
- Carers?
- Patients?

She argued that it was vitally important that whoever assessed the wound and subsequently decided on the dressing and further evaluation must have an in-depth knowledge of the wound healing process and mode of action of chosen dressings. Without this knowledge, she argued, progression of the wound could not be effectively assessed and any deterioration in the wound healing process might be missed and not acted upon early enough.

Ousey proceeded to debate whether tissue viability required a specialist nurse or if indeed the generalist nurse should be equipped with skills that would allow them to become autonomous in managing skin integrity. The audience

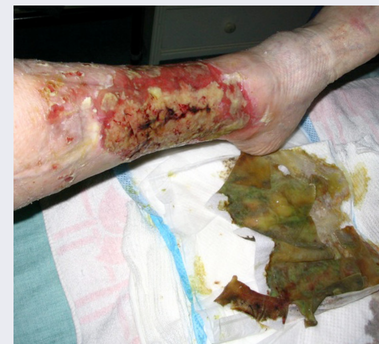

Figure 1: A mixed aetiology ulcer. Managing the symptom will improve the patient's level of concordance, thereby improving his or her quality of life.

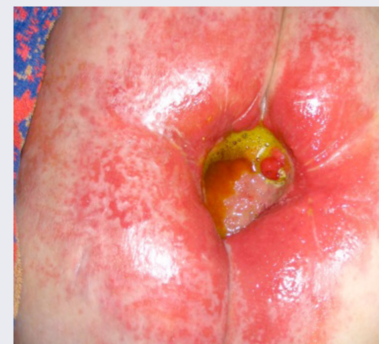

Figure 2: An abdominal surgical wound with vast levels of exudate. This required multiple dressing changes each day until further surgical intervention was performed.

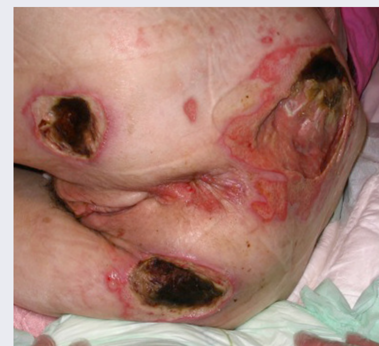

Figure 3: An patient at end of life with pressure damage to the sacrum. The aim here was to provide comfort and conformability.

identified that they believed a specialist nurse was needed and Ousey agreed, stating that tissue viability nurse specialists had the opportunity to make a difference to the care of patients requiring all aspects of skin management and that their role should encompass that of educator, strategic planner, manager and advisor.

She concluded that, although choice of wound dressing is individual and based on patient's symptoms, an informed effective choice cannot be made if practitioners do not understand research and the evidence supporting the use of the dressings.

Carol Roberts: cost and using the formulary

Next up was Carol Roberts, who mounted a spirited defence of using the formulary as tool for making wound dressing decisions.

Return on investment of the dressing versus unit price

Roberts highlighted that when deciding on a dressing, there was always more to consider than simply the unit price as a number of other variables come into play, including:

- Total cost of treatment will include number of GP consultations, district nurse time, length of time treated, hospital admissions, the cost of any co-treatments e.g. pain medication
- Reduce overall cost – patient care pathway
- Effective measurement of outcomes.

A trained prescriber using a formulary is more likely to take these other factors into account when choosing a dressing.

Appropriate use

It is also important to make sure a dressing is appropriate for use with a patient (the right patient, right dressing, right time). Dressings that are not appropriate to the wound can potentially:

- Increase heal time
- Lead to further/prolonged infection
- Reduce patient confidence in treatment
- Threaten compliance.

It is vital to consider the patient's perspective and wound management should always be a partnership between clinician and patient.

Frequency of use/dressing changes

Roberts argued that the formulary can be used to plan the potential expenditure on a dressing regimen as less frequent changes usually means less overall cost as well as fewer district nurse visits, for example.

Similarly, the frequency of dressing change needs to be tailored to the particular wound as factors such as increased exudate, for example, will increase the number of changes required.

Avoidance of secondary care admission/ referrals

A dressing that is chosen appropriately from a formulary can also reduce the amount of admissions needed from secondary care, as well as follow-up in the form of clinic visits and district nursing time, etc. Patients who have had their dressings chosen inappropriately may need admissions due to:

- Non-healing – dressing failure
- Non-compliance
- More serious infection – systemic
- The increased knowledge of prescribers who have been trained to choose from a formulary increases the likelihood of referring only when necessary.

Avoidance of waste

Prescribing appropriately from a formulary also helps to avoid waste in the form of fewer dressings being discarded by patients through non-concordance, or dressings being discarded by clinicians for not performing the correct task, i.e. reducing infection. Prescribing from a formulary mitigates against:

- Inappropriate type of dressings being prescribed
- Overprescribing
- Non-compliance
- Basic dressing packs for each patient can contain equipment that is not needed
- Hoarding by patients or care homes.

The X Factor: holistic approach best

Roberts wound up her section of the debate by emphasising that obviously, a

'Prescribing from a formulary helps to avoid waste in the form of fewer dressings discarded'

References

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holistic approach to dressing choice is best, including:
- Overall cost should encompasses all factors discussed above
- Informed and educated prescribing
- Involvement of multidisciplinary team when developing formulary – ownership improves adherence
- Ideally include a range of dressings in formulary to contend with needs of patients and prescriber
- Choice but limited with regular review points.

Julian Guest: health economics

The final presentation was from Julian Guest, who felt strongly that dressing choice should be predicated on health economics. He started with an explanation of health economics and was at pains to point out that despite its reputation as a rather dry, analytical area, health economics does in fact have a practical, clinical application when it comes to decision-making, such as choosing a therapy.

What is health economics?

Health economics is the study of allocating limited health care resources among unlimited demands to achieve the maximum health benefit for society.

What is economic evaluation?

Economic evaluation (e.g. cost-effectiveness analysis) provides a framework to systematically compare two or more alternatives in terms of their costs and likely health outcomes, such as probability of wound healing or changes in health-related quality of life.

What are the benefits of using cost-effectiveness data to inform patients' management decisions?

If your practice increasingly manages patients in a cost-effective manner, it should be possible to manage more patients within a fixed budget and time frame.

What is included in a cost-effectiveness analysis?

A cost-effectiveness analysis of comparative treatments, in this case dressings, would be informed by the available evidence (from published literature, clinical trials, etc) and would consider:
- Probability of events occurring (e.g. probability of developing symptoms, adverse events, etc)
- Healthcare resource use and corresponding costs
- Health effects/clinical outcomes
- Subjective impact of treatment on patients, i.e. health-related quality of life.

Benefit of economic evaluation

Economic evaluations facilitate the best possible use of available resources, such as nurse time or dressings, in a rational decision-making context in order to accrue maximum healthcare benefits from limited resources.

RESULT

While all of the speakers received their fair share of green cards throughout the debate, by the end the clear favourite with delegates was the case put forward by Julian Guest.

This was mainly because the audience were able to see that while symptoms, evidence and using the formulary, were all valid options for choosing dressings, the health economic concept of using all of these variables to arrive at what is best for the patients was the most effective.

CONCLUSION

Apart from anything, this debate demonstrated how difficult it can be for modern wound care clinicians to choose the correct treatment for each patient.

It also highlighted that the best way forward when attempting to match a dressing to a wound is to take a holistic view, bearing in mind the patient's symptoms, the evidence for individual treatments, the formulary recommendations as well as whether the chosen treatment is cost-effective and clinically beneficial over time.

In the end, the success of this debate lay not in identifying one definitive path of action that a clinician should follow when choosing a dressing, but rather that the practitioner should take into account a plethora of interrelated factors before choosing any product.

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