

Meeting reports



Wounds UK 2006 Conference, Harrogate, 13th November 2006

A combination of education, networking opportunities and access to a wealth of wound care experts helped the 2006 Wounds UK conference to be a huge success. It proved to be one of the most popular Wounds UK events ever held with more than 1000 delegates and industry staff in attendance. There was something for everyone, with many of the world's leading experts in wounds, leg ulcer and pressure ulcer care presenting in meetings and seminars. In addition, there were many new speakers presenting on a range of topics, highlighting some of the excellent work being done throughout the UK and Europe.

This year's conference was set up to allow people to experience a broad range of topics and the consensus from those who attended was that this was a hugely valuable event. It also had Wounds UK's biggest exhibition ever held, with well over 60 companies and all the wound care societies from the UK and Europe present in the main exhibition. There were many new products on display, among them some new topical negative pressure devices and a new electrical stimulation product. For the first time at the conference there was a speed meeting session with delegates given the chance to meet a variety of experts for a five-minute chat. Those who took this opportunity found it was a really rewarding experience.

The first plenary session was sponsored by 3M and saw Helen Edwards, Christine Moffatt and Hugo Partsch focusing on the role of compression therapy in improving quality of life. Parallel

sessions on day one were also held covering pressure ulcers and advanced wound biology.

Activa sponsored a very well received plenary session on lymphoedema, a problem which has become much more prevalent in recent years and one that is often undiagnosed in many patients.

The opening evening saw the honey debate, sponsored by Medihoney with representatives from other companies also taking part. Keith Cutting chaired and spoke at this very successful event which aimed to shed light on the benefits of using medical-grade honey in wound care and answer queries relating to the antimicrobial benefits of honey treatment. The ConvaTec-sponsored plenary session on wound infection included a discussion of the problems of dealing with infected wounds that have high levels of exudate. Andrew Kingsley, Keith Harding and Kath Vowden all contributed to this highly topical session. Ark Therapeutics also sponsored an informative plenary session on the use of Kerraboot for the management of chronic and heavily exuding wounds.

Other plenary sessions included a focus on pain during dressing changes hosted by Mölnlycke which examined some solutions for patients experiencing pain at dressing change. An exploration into the value of collaborative working was the subject of the symposium held by Smith and Nephew, with Jacqui Fletcher among the speakers.

KCI tackled the current political issues in the final symposium of the conference entitled 'Building your competitive

advantage', a session which aimed to encourage tissue viability nurses to promote the value of their work, both at a local and governmental level. A fascinating insight into political lobbying was given by Steve Morgan of Morgan Allen Moore, a leading public affairs consultancy.

Jan Apvelqvist presented a session which covered the care of the diabetic foot and in his usual style gave the audience food for thought and an amazing insight into how to best deal with patients who have diabetic foot ulceration. Other presentations which I personally enjoyed were Rose Cooper's microbiology session, Stuart Enoch on burns and plastic surgery and David Leaper discussing the surgical management of the abdomen.

There was a record number of papers submitted as free papers which were presented in two sessions and posters which were on display throughout the event.

As always, the gala dinner proved popular with a huge number of delegates and industry representatives dancing the night away.

A huge number of delegates attended the closing session of the conference during which Roger Black MBE discussed his career as an olympic runner and how he maintained his motivation during many setbacks and injury worries early in his career. This was a fitting end to what had been an excellent, innovative and informative conference.

John Timmons, Tissue Viability Nurse, Department of Tissue Viability, Aberdeen Royal Infirmary

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'Medical honey — towards a greater understanding'. Honey focus session sponsored by Medihoney (Europe) Ltd, Wounds UK 2006 Conference, Harrogate

More than 100 people attended the honey focus session on the opening day of the 2006 Wounds UK conference. Medihoney (Europe) Ltd were keen to raise awareness of the use of antibacterial medical honey within wound care and explain the mechanisms that make some honeys superior wound care products. It also wanted to give clinicians the opportunity to clarify any issues they might have about the use of honey in wound care by offering the opportunity to put questions to an expert panel.

The event was chaired by Keith Cutting, Principal Lecturer at Buckinghamshire Chilterns University, who presented evidence on the beneficial use of medical honey on a variety of wounds. The use of medical honey is frequently questioned due to lack of research, however; Mr Cutting quoted an extensive literature review which cited 17 randomised control trials with 1,965 participants, five clinical trials with 97 participants and wound healing effectiveness animal trials on 533 wounds, as well as a growing number of case study presentations, concerning the use of honey in wound care.

Overall the key message was that there is an increasing body of evidence showing improved healing rates on a wide variety of wounds and the ability of antibacterial medical honey to kick start recalcitrant wounds. In conclusion, the supporting evidence for the use of medical honey as a wound dressing is possibly more extensive than many frequently used wound care products on the market. Case studies highlighted included combating MRSA infection and prevention of amputation in a diabetic patient; the use of medical honey as a prophylactic for the prevention of infections; odour control; the use of antibacterial medical honey in breast care and oncology, and in burns patients where

medical honey compared favourably to silver sulphadiazine.

Mr Cutting also highlighted the work that is presently being carried out to explore the potential of antibacterial medical honey in the disruption of biofilms and the prevention of their formation.

Anthony Moloney, Science and Strategic Development Director for Medihoney Pty Ltd described how medical grade honey is produced, screened, standardised and prepared for medical use. The enormous difference between honeys was highlighted. Honey can be produced from a wide variety of different floral sources, and they all vary in their antibacterial activity and wound healing potential. He stressed that clinicians should consider the claims on product packaging, as in the 'instructions for use' leaflets, as being the only claims that have been validated and assessed by regulatory authorities.

On discussing floral sourcing, the main source frequently quoted as exceptional antibacterial honey is from the *Leptospermum* sp. This plant originated in Australia where there are 79 species; the plant dispersed relatively recently from Eastern Australia to New Zealand and South East Asia. The *leptospermum* sp. produces variable peroxide and non-peroxide activity. The variability of the antibacterial quality of different honeys is a concern and exacerbated by the confusion caused by the use of non-validated testing standards such as unique manuka factor (UMF) to rate the antibacterial

properties of medical honey. As there are many hundreds of honey types of varying medical usefulness, careful standardisation using validated mechanisms of grading is required.

Mr Moloney stated that he was working with the British Standards authority to determine a reliable test method for all medical honeys so clinicians have a clear understanding of the antibacterial effectiveness of the product they are using. Mr Moloney also highlighted the benefits of selected medical honeys on wound healing and protection due to: antibacterial activity; atraumatic wound debridement and dressing changes; protease inhibition, pH correction and high patient acceptability.

Leading suppliers of medical honey products were invited to join the panel to answer questions about the use of honey in wound care. The panel included Dr Rose Cooper (University of Wales Institute), Claire Acton, Tissue Viability Nurse and Vascular Nurse Specialist (Queen Elizabeth Hospital, London), Gill Dunwoody, Tissue Viability Nurse Specialist (Bromley Primary Care Trust), Anthony Moloney (Medihoney) and Chris Hill (Advancis).

A question and answer session prompted a fascinating discussion on topics such as the use of honey products in patients with diabetes (the panel had not experienced any reported problems but recommended blood glucose monitoring). The discussion could have continued for much longer and provided a stimulating end to the session. **WUK**



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'Kerraboot®: building the evidence base for successful wound management' plenary session at Wounds UK 2006 Conference, Harrogate, 14th November 2006

Kerraboot® (Ark Therapeutics, London) has been used in both primary and secondary care in the UK. To review the success of this unique approach to the management of delayed or slow-healing chronic wounds, three highly respected wound care experts came together at the Wounds UK conference to examine the evidence base.

In this well-attended, interesting and informative plenary session, the importance of chronic wound fluid in wound healing and the use of Kerraboot in a range of wound types of differing severity was discussed. In the first presentation, Andrew Kingsley, Tissue Viability Specialist at North Devon Hospital, explained the importance of chronic wound fluid (CWF) on wound healing. When a wound heals normally it moves through three overlapping key stages of healing: inflammation; cell proliferation and matrix deposition; and matrix remodelling. However, the healing process is highly complex and it does not always run smoothly. The molecular environment of a chronic wound differs significantly from an acute wound. In an acute wound the molecular environment

facilitates healing whereas the molecular environment in a chronic wound can actually inhibit healing with an apparent tipping point at about 4–6 weeks when things go wrong (Figure 1).

Mr Kingsley reviewed three key papers that provide evidence about the detrimental effects of CWF on wound healing. In the first, CWF collected from non-healing venous leg ulcers failed to stimulate the proliferation of fibroblasts and keratinocytes and increased the presence of thymidine, showing cell damage had occurred, and that CWF can stop all the major components of regeneration (Bucalo et al, 1993).

The second study collected CWF from a variety of wounds, such as acute, chronic, non-healing and more rapidly healing venous ulcers (Drinkwater et al, 2002). It investigated the effect of CWF on capillary formation and found that the process was inhibited by CWF from slow or non-healing ulcers. This suggested that the proteinase environment in CWF could be inhibiting the angiogenic drive.

In the final study, by the same group (Drinkwater et al, 2003), they investigated whether vascular endothelial growth factor

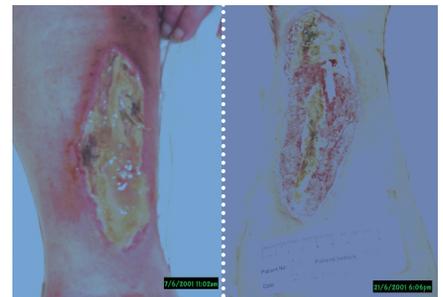


Figure 2. Graft failure of an ischaemic leg.

(VEGF) was being expressed in endothelial cells in chronic non-healing wounds. In fact, VEGF was being produced in greater amounts than in acute wound fluids but the angiogenic drive was being inhibited because of the proteinase environment.

Mr Kingsley concluded his presentation by discussing how removing CWF from the wound bed can facilitate healing. The best solution is to drain the fluid away from the wound by increasing the blood flow via vasodilatation by keeping the wound warm. Kerraboot is a unique wound management system that works in this way.

Richard Leigh, Chief Podiatrist at University College Hospital, London, is very familiar with the development of Kerraboot and was involved in the early studies. Mr Leigh began by reviewing one of the first case studies of Kerraboot. Initial use of Kerraboot tended to be limited to patients for whom a limb salvage operation was being considered as the best solution. The case involved a 67-year-old man with type 2 diabetes who presented with pressure ulcers on both heels. With conventional treatment the right foot healed within four weeks and initially the left foot appeared to be healing. However, by five weeks the left foot was infected with methicillin-resistant *Staphylococcus aureus* and had deteriorated to the point where below-knee amputation was being considered. Kerraboot was initially applied twice daily and, with instruction, the patient was able to apply the Kerraboot himself. After 14 days the wound base demonstrated a noticeable improvement. After 21 days the ulcer margins had contracted and granulation was visible at the base of the wound. The patient was

Molecular environment

ACUTE

- ▶▶ Low/balanced inflammatory cytokines
- ▶▶ Low proteases and ROS
- ▶▶ Cells respond to growth factors and there is high mitosis
- ▶▶ Rapid cellular migration

CHRONIC

- ▶▶ High inflammatory cytokines
- ▶▶ High proteases & low TIMPs
- ▶▶ Senescent cells unresponsive to growth factors with low mitogenic activity
- ▶▶ Poor cellular migration



Figure 1. The tipping point from acute to chronic seems to occur at about 4–6 weeks (adapted from Mast and Schultz, 1996).

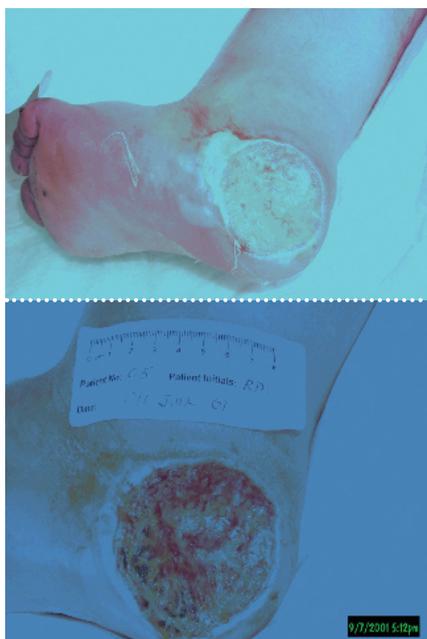


Figure 3. Ischaemic ulcer.

discharged just three weeks after being considered for amputation.

Mr Leigh went on to present the results of an early clinical trial with Kerraboot which aimed to provide assessments on ease of administration and dressing time, patient comfort and acceptability. Investigating the effectiveness of Kerraboot for ulcer healing was a secondary objective. Fourteen inpatients with 15 ulcers completed the trial. The aetiology was varied: three had neuropathy; five had neuro-ischaemic disease and six had arterial disease. The duration of the ulcer ranged from 0.5–75 weeks. Mr Leigh presented before and after photos of some of these wounds, demonstrating a significant improvement in the wound bed in just four weeks (Figures 2 and 3).

A total of 85% of patients reported that Kerraboot was 'better' than their previous dressings and all healthcare professionals rated it as 'better' than previous dressings. Dressing change time was reduced by up to 70%, with two minutes being the minimum time. During this study, 82% of ulcers decreased by up to 50% and 18% decreased by more than 50%. Mr Leigh concluded that



Speakers at the Kerraboot symposium, Wounds UK conference 2006, Harrogate.

Kerraboot is highly rated by both patients and healthcare professionals; it is quick to change and has not been associated with any serious adverse incidents. The results, in his opinion, therefore support its use as a cost-effective and clinically-effective ulcer dressing device.

In the final presentation, Mike Edmonds, Consultant Physician at King's College Hospital, London, presented the results of a comparative study between Kerraboot and a standard dressing (Allevyn®) (Edmonds et al, 2006). The study had the primary objective of assessing patient and healthcare worker acceptability in the treatment of diabetic neuropathic ulcers in the community. The time required for dressing change, ease of dressing application and removal, resource utilisation and convenience were assessed. The secondary objective was to assess healing rates.

The results demonstrated that Kerraboot was easier to apply. In fact, within two weeks, 100% (n=14) of the Kerraboot group were able to self-change the dressing, which could lead to a significant reduction in healthcare costs. The clinical efficacy results demonstrated that complete healing rates were comparable between the

Kerraboot and Allevyn groups. Further, the unhealed ulcers in the Kerraboot group showed a greater improvement in terms of increased granulation, less slough and an overall improved ulcer appearance compared with Allevyn.

In his summing up of the symposium, Mr Edmonds concluded that:

- ▶▶ Chronic wound exudate is damaging to wounds
- ▶▶ Kerraboot provides a novel approach to the removal of CWF and provides an ideal moist wound healing environment
- ▶▶ Kerraboot is useful for complex, chronic and heavily exuding wounds
- ▶▶ Kerraboot has the potential to deliver significant cost savings because patients can self-manage dressing changes. **WUK**

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Drinkwater SL, Smith A, Sawyer BM, Burnand KG (2002) *Br J Surg* 89(6): 709–13

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Mast BA, Schultz GS (1996) *Wound Rep Reg* 4: 411–20