

Put your best foot forward: The future of diabetic foot ulcers

Professional Select Committee sponsored by ConvaTec
Manchester Town Hall, 2 December 2005



A committee of podiatrists and tissue viability nurses (all invited by ConvaTec) gathered at Manchester Town Hall on 2 December 2005 to discuss three important topics relating to the management of diabetic foot ulcers: ideal dressings for diabetic foot ulcers; the prophylactic use of silver versus antibiotics; and shared care pathways. For each ConvaTec-chosen topic, presentations were given by two Expert Witnesses, and these were followed by discussions involving the whole committee. (Summary points from these sessions appear in the boxes that follow.) A panel of four members of this committee was then asked, based on the discussions, to present recommendations for the improvement of future diabetic foot ulcer management.

These recommendations (see page 24) are intended to stimulate discussion in the diabetic foot community, using, for example, the pages of this journal.

The panel

- **Neil Baker** is Clinical Lead for the Diabetic Foot at Ipswich Hospital NHS Trust.
- **Keith McCormick** is Diabetes Podiatrist at the Victoria Infirmary and a Clinical Teacher at the Southern General Hospital in Glasgow.
- **Louise Stuart** is a Lecturer and Practitioner at the University of Salford's School of Podiatry.
- **Andrew Kingsley** is Clinical Nurse Specialist in Tissue Viability at North Devon District Hospital.

Topic 1: What is an ideal dressing regimen for diabetic foot ulcers?

Expert Witnesses: Martin Fox (Clinical Lead Podiatrist, Manchester) and Scott Cawley (Lead Specialist Podiatrist, Cardiff)

- Appropriate dressing selection for diabetic foot ulcers is imperative, even though this accounts for only a small part of the overall management of patients with diabetic foot ulcers.
- There are some basic criteria that make up an ideal dressing, including the following.
 - It should be able to kill a broad spectrum of bacteria, including resistant strains.
 - It should have rapid and sustained antimicrobial activity.
 - It should be designed to minimise cross-contamination.
 - It should be able to maintain a moist environment for optimal wound healing.
 - It should allow absorption and retention at varying exudate levels
 - It should be designed to minimise the risk of damage to peri-wound skin.
 - It should be conformable to the wound.
 - It should be versatile, for use on a wide range of wounds.
 - It should be comfortable for the patient.
 - It should be designed to control odour.
 - It should be easy to use.
 - It should be cost-effective.

- It is essential to choose the most appropriate dressing to be used in conjunction with other therapies, such as debridement, off-loading and infection control. The 'best fit' dressing must be used for the appropriate wound at the appropriate time.
- With the absence of a clear evidence base, consensus guidelines, such as the *International Consensus on the Diabetic Foot* (<http://www.iwgdf.org/home.htm> [accessed 08.02.2006]), should be used to guide clinical practice.
- Such expert consensus is valuable, but the long-term aim must be to conduct randomised controlled trials of dressings for diabetic foot ulcers. In the meantime, the Cochrane Database of Systematic Reviews will be helpful.
- The diabetic foot ulcer is not in itself a diagnosis, but instead a manifestation of a complex of co-morbidities. Holistic management of patients with diabetic foot ulcers is therefore crucial.
- Management of diabetic foot ulcers must be not only holistic, though; it must be patient centred as well. It must also involve all members of the multidisciplinary team.
- To facilitate good practice in the use of dressings for diabetic foot ulcers, a tool that aids communication between members of the multidisciplinary team is needed.

Topic 2: Prophylactic use of silver vs. antibiotics in diabetic foot ulcers

Expert Witnesses: *Duncan Stang (Chief Podiatrist, East Kilbride)*
and *Julia Shaw (Podiatry Manager, Belfast)*

- While pressure relief and debridement must not be forgotten, the prevention and control of infection are two major pieces of the jigsaw in the management of diabetic foot ulcers.
- Bacterial strain differences will have an impact on the choice of antibiotics used, both geographically and temporally.
- There is no doubt that antibiotics can save limbs, and even lives, but there are several arguments against their blanket prescription for the prevention of infection: they may upset diabetes control; the majority of diabetic foot ulcers have ischaemic elements, which limits the activity of antibiotics; and there are cost issues.
- Moreover, looking at the 'big picture', consideration of resistance levels leads to a major dilemma with antibiotics. Using silver for prophylaxis, on the other hand, may be associated with a smaller risk of resistance building up.

- A case-by-case approach, applying clinical judgment, may be superior to broad guidelines. For instance, a prophylactic approach to the management of infection in diabetic foot ulcers may be warranted in a person with a history of recurrent clinical infection.
- If a prophylactic approach is not opted for, an early and accurate identification of infection is crucial.
- There is a lack of clarity on definitions in diabetic foot wound care, particularly for the meanings of 'prophylaxis' and 'at risk'. Definitions need to be in place before recommendations on therapy can be moved forward.
- An especially clear definition is needed for 'prophylaxis' with regard to antimicrobials, and where they should or should not be used.
- Labelling a wound 'at risk' will involve consideration of many factors, including the patient's self-care practices and level of hygiene.
- All healthcare professionals are trained to use clinical judgment in areas such as the prevention of infection, but this judgment should be based on systematic, holistic assessment rather than simply looking at the wound itself.

Topic 3: Shared care pathways – fact or fiction?

Expert Witnesses: *Alex Duff (Chief Podiatrist, Dartford)* and
Lynne Watret (Clinical Nurse Specialist in Tissue Viability, Glasgow)

- The diabetic foot is a multifactorial condition and its management can be made more difficult because of geographical reasons.
- Shared care is the joint provision of care between specialists and primary care health professionals; a variety of models have been proposed.
- While setting up shared care pathways will require time – to draw up guidelines, for instance – their implementation has many potential benefits.
- For healthcare professionals, these would include multidisciplinary input, the formal provision of named persons to contact, the promotion of National Service Framework ideals, an increase in skills, and facilitating emergency referrals.
- For patients, the potential benefits of shared care pathways would include multidisciplinary input, relatively easy access to care services, limited outpatient visits and a reduced length of stay.

- All of those involved in shared care pathways must have appropriate education and training, as well as a mutual respect for fellow members of the multidisciplinary team.
- Although patient record keeping is set to go electronic by 2010, patient-held records may be vital to shared care pathways in the meantime.
- Patient-held records seem to be popular with healthcare professionals; the perspective of patients on this issue should also be sought.
- Important considerations for record keeping include what level of language should be used, what the minimum data set should be, and whether each patient holds other records for different conditions.
- Shared care pathways are certainly possible if healthcare professionals are willing to get involved.
- Possible barriers to professional groups working together in shared care pathways include issues of professional identity, professional status and professional discretion.
- It will need to be considered whether it is worthwhile formalising shared care into evidence-based, auditable integrated care plans.

A committee of podiatrists and tissue viability nurses (not all pictured) gathered at Manchester Town Hall, at the invitation of ConvaTec, to discuss the future of diabetic foot ulcers.



Recommendations of the panel

Topic 1: What is an ideal dressing regimen for diabetic foot ulcers?

- 1 Where appropriate, patients should be more involved and utilised as a valuable resource to facilitate their own communication on wound care effectively.
- 2 To facilitate good practice in the use of dressings, a tool that aids communication between members of the multidisciplinary team should be developed. This could be based on existing tools such as Applied Wound Management (http://www.woundsuk.com/applied_wound_management.shtml [accessed 08.02.2006]).
- 3 Basic recommendations on the choice, application and monitoring of dressings relating to the diabetic foot ulcer must be formulated (the criteria for an ideal dressing discussed in Topic 1 could be incorporated). A way of making this a reality would be to assimilate clinical guidelines for the diabetic foot developed by Foot in Diabetes UK (FDUK) and available on the National Electronic Library for Health (<http://www.nelh.nhs.uk> [accessed 08.02.2006]) and on the Diabetes UK website (<http://www.diabetes.org.uk/home.htm> [accessed 08.02.2006]). The aim would be to incorporate guidelines on dressings into a larger strategy rather than developing them as 'stand alone' recommendations.
- 4 The continuing professional development package launched at the FDUK meeting on 1 December 2005 should be developed with key stakeholders, which may include commercial companies and specialist interest groups from other disciplines, to raise awareness of specific wound management problems of the diabetic foot and management of diabetic foot ulceration.

Topic 2: Prophylactic use of silver vs. antibiotics in diabetic foot ulcers

- 1 The terms 'at risk' and 'prophylaxis' as they apply to diabetic foot ulcers must be clarified.
- 2 Where possible, prospective audits should be adopted to assess the efficacy and efficiency of clinical therapies to manage the diabetic foot, and these audits should include the use of silver dressings.
- 3 An algorithm should be developed to aid clinical decision making with the use of topical antimicrobial agents.
- 4 Further funded research is required to evaluate the variances in therapeutic dosing and formulation of silver-based products.

Topic 3: Shared care pathways – fact or fiction?

- 1 The National Institute for Health and Clinical Excellence clinical guideline 10 (*Type 2 diabetes – footcare*) should be nationally adopted and audited locally.
- 2 The national specialist interest group for the diabetic foot should bring together examples of good practice for patient-held records and develop a patient-held record to be used as an example that could be adopted at the national level.
- 3 Examples of best practice that are already up and running in shared care should be sought and distributed.