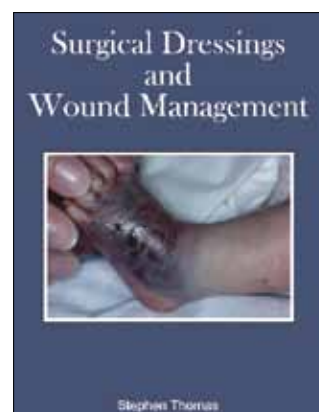


Book review

Title *Surgical Dressings and Wound Management*
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Review by Laurie King
Clinical Lead Podiatrist, Diabetic Foot Clinic, Oxford Centre for Diabetes, Endocrinology & Metabolism, Oxford

Wounds are a significant burden, both financially and in terms of quality of life, to people with wounds and the healthcare system. Drew et al (2007) carried out a wound care audit in Hull and the East Riding of Yorkshire and concluded that the cost of treating wounds came to between £2.5 million and £3.1 million per 100 000 people in the population. With healthcare resources at a premium it is essential to provide value for money in all areas of the NHS, wound care included.

Questions over both the clinical and cost-effectiveness of the plethora of wound care products for use in diabetic foot ulceration remains, in the most part, uninformed by systematic review data (O'Meara et al, 2000). In a recent attempt to compare three dressings used in the treatment of diabetic foot ulceration, Jeffcoate et al (2009) published a health technology assessment in which the authors conducted a randomised controlled trial comparing healing rates for three dressings: a simple non-adherent dressing, N-A (Johnson & Johnson Medical, Berkshire); an antiseptic iodine dressing, Inadine (Johnson & Johnson Medical); and a hydrocolloid preparation, Aquacel (ConvaTec,

Middlesex). The study concluded that there was no difference between the three dressings in terms of number of healed ulcers by 24 weeks, or in the mean time to healing. The authors concluded that "there is no reason why the least costly of the three dressings could not be used more widely across the UK National Health Service, thus generating potentially substantial savings".

In response to Jeffcoate et al's (2009) health technology assessment, Timmons and Chadwick (2010) opened debate in *The Diabetic Foot Journal* on the study's design, calling for the right dressing for the right wound at the right time. Jeffcoate and Game (2010) replied that new, generally more expensive, interventions should not be adopted in routine clinical practice without convincing – not anecdotal – evidence of effectiveness.

This leaves the practitioner wanting answers. On the one hand, we have a slim evidence base for the use of "advanced" dressings, and yet experience in the clinic suggests that individual patients with individual diabetic foot ulcers seem to respond better to treatment with some dressings rather than others, and that the wrong dressing on the wrong

patient can result in deterioration. But is this science?

Thankfully, *Surgical Dressings and Wound Management* by Stephen Thomas (2010) is a comprehensive reference book to help the reader navigate the world of wound dressings. Consisting of 720 pages, including 125 illustrations, the book starts with some background. The structure and function of the skin, classification of wounds, costs associated with wounds, mechanisms of wound healing and wound exudate are the first topics covered. Next, the development of dressings, and the laboratory testing process, is described. Individual dressing types and certain auxiliary wound therapies (maggot therapy; topical negative pressure therapy) are covered in chapters 8–20. A chapter is dedicated to dressing selection. The final chapter is a buyer's guide that includes an alphabetical list of products and manufacturers' contact details.

The chapter dealing with dressing selection is practical, helping the practitioner to choose an appropriate dressing, or dressing system, for a specific wound. This choice is determined by a number of factors and the chapter aids the practitioner in selecting an appropriate dressing

based on the condition of the wound, the condition of the surrounding skin and the anatomical location, with consideration of the wound's underlying aetiology.

Although the book addresses the dressing and therapies for wounds in general, wound care for the ulcerated diabetic foot is also considered specifically. Under the heading "black necrotic wounds", Thomas points out the need to consider the underlying disease state, and illustrates this by looking at a dry, ischaemic necrotic diabetic toe. The author suggests that no treatment is either indicated or necessary, and draws the reader's attention to the fact that the digit should be dry and keeping the digit dry and free of infection while awaiting auto-amputation should be the goal.

The chapter on hydrocolloid dressings has a section on the controversial use of hydrocolloids on diabetic foot ulcers (Gill, 1999). Thomas discusses the reported adverse effects of hydrocolloids and compares these findings with those who find in favour of hydrocolloids. With so few data, sensible recommendations are made on their clinical use – namely in neuropathic ulcers – where, he says: "there appears to be no reason why hydrocolloid dressings should not be used to treat these wounds. However, in marked contrast, necrotic areas which are caused by vascular damage, or toes that have become discoloured and 'dusky' looking, are probably not candidates for hydrocolloid therapy".

In the chapter on silver dressings I was fascinated to read the element's history as an antibacterial agent; Aristotle advised Alexander the Great to store his water in silver vessels; early settlers in America placed silver dollars in their wooden water barrels; and silver also lines spacecraft water

tanks to prevent bacterial growth to this day. The questions of toxicity, resistance, and cost associated with silver are addressed. The chapter is concluded with an interesting discussion on the VULCAN trial (Michaels et al, 2009), in which it is revealed that for 2006–2007 the NHS spent more than £100 million on dressings, a quarter of that sum was spent on silver-containing dressings alone. Thomas states that, based on the current evidence: "the practice of using silver dressings as a first-line treatment for all types of wounds cannot be supported either on clinical or economic grounds".

The chapter on honey and sugar dressings is particularly interesting. Laboratory studies have shown that honey is effective against biofilms formed by *Staphylococcus aureus* and *Pseudomonas aeruginosa*. Thomas concludes that it is difficult not to have sympathy with the position of Molan (2006), who identified 17 randomised controlled trials (in non-diabetic wounds) and expressed astonishment at the lack of universal acceptance of honey as a wound dressing. However, there is only one study on the use of honey in diabetic foot ulcers referred to in the book (Shukrimi et al, 2008), in which honey dressings are compared with povidone iodine and it was found that mean healing time (14.4 days) with use of the former was shorter than for the latter (15.4 days; $P < 0.005$).

While the search for the holy grail of diabetic foot dressings continues, so the debate over the clinical and cost-effectiveness of those products currently available will continue. Thomas' *Surgical Dressings and Wound Management* is perhaps the most comprehensive guide to this contested area. ■

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Timmons J, Chadwick P (2010). Right product, right wound, right time? *The Diabetic Foot Journal* 13: 62–6

Surgical Dressings and Wound Management is available in softback book and as an e-book. Sample chapters and ordering information can be found online at bit.ly/hZyXAk