GUEST EDITORIAL

Evidence-Based Medicine in Wound Care

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The *Journal of the American Medical Association* (JAMA) has an ongoing series entitled “Clinician’s Corner.” In the spirit of the Cochrane reviews, it covers the evidence for treatment of common clinical conditions. In December, it reviewed the treatment of pressure ulcers.¹ As I read this review, I became more and more disturbed. It searched the literature to find relevant randomized controlled trials (RCTs). Out of 872 abstracts, only 103 were deemed relevant by meeting quality criteria. Only 16 out of the 103 met 4 or more of the checklist to evaluate a report of a nonpharmacologic trial (CLEAR NPT). Of the 103, 45 trials (43.7%) reported funding by for-profit manufacturers, and 29 (28.2%) did not indicate sources of funding; 83 trials (80.6%) did not provide sufficient information about the authors’ potential financial conflicts of interest. Their conclusions were that there was little evidence to support the use of a particular support surface (powered vs nonpowered), a particular dressing, nutritional support, biological agents, or adjunctive therapies. A previous review in JAMA² came to similar conclusions.

We all know that pressure ulcers are common, with reported incidences as much as 38% in acute care and 23.9% in long-term care.² The National Pressure Ulcer Advisory Panel established its staging system at the 1989 Consensus Development Conference. We have had a multidisciplinary board examination in wound care now for more than 10 years. Yet there is a paucity of quality scientific clinical research to direct the care of these morbid wounds, and the involvement of the for-profit manufacturers remains intimate. We in the practice of wound care will never achieve legitimacy in the eyes of conventional medicine, and cannot hope to establish wound care as a specialty under the National Board of Medical Examiners, until we can produce better research to

validate our practice and to justify the body of wound care knowledge as truly unique and separate from other fields in medicine. I know that a “Special Report” recently published in *Advances in Skin and Wound Care* by two well-respected wound care practitioners argues that the standard RCT may not be practical in wound care.³ However, that runs against the tide in the rest of medicine, which is getting more and more strict in what it considers “scientific” and what can be used in “evidence-based medicine.” The *Journal of Bone and Joint Surgery* (the premier orthopaedic publication) published in January 2009 new rules for the publication of clinical trials.⁴ All trials will need to be registered in a public trials registry, clinical trials will have to follow the Consolidated Standards of Reporting Trials (CONSORT) guidelines, and primary results must be based on intention-to-treat analysis. JAMA instituted these rules in 2005. I know that pressure ulcers are heterogeneous, but so too are tibial fractures. Yet the orthopaedic community has been able to categorize these fractures and agree on standard reporting measures to allow good research to guide their practice.

The wound care research community must agree on standard reporting measurements and agree on what constitutes progress in wound healing or on defined end points. Researchers must adhere to these so that trials may be combined by meta-analysis. We must work to eliminate the influence of the for-profit industry or, at the very least, have very clear disclosure requirements. Wound care practitioners must be discriminating in their use and support of various treatments, modalities, dressings, and equipment. They must demand good science before the widespread adoption of every new technique. Our journals must be appropriately peer reviewed and use the principles of good scientific literature that are widely agreed on by the rest of medicine. Only then will we achieve the legitimacy that we all desire and, even more important, only then will we assure that we are doing the best for our patients.

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References

1. Reddy M, Gill SS, Kalkar SR, Wu W, Anderson PJ, Rochon PA. Treatment of pressure ulcers: a systematic review. *JAMA*. 2008;300(22):2647–62.
2. Reddy M, Gill SS, Rochon PA. Preventing pressure ulcers: a systematic review. *JAMA*. 2006;296(8):974–84.
3. Carter M, Warriner RA. Evidence-based medicine in wound care: time for a new paradigm. *Adv Skin Wound Care*. 2009;22(1):12–6.
4. Swiontkowski MF. Publication of clinical trials. *J Bone Joint Surg Am*. 2009;91(1):1–2.