Standards of Care, Evidence-Based Medicine, and the Emperor's New Clothes

To the Editor:

Commendably, the *Journal of Hand Surgery* continues to evolve and improve the quality of its articles. Recent enhancements include the designation of clinical studies by levels of evidence ranging from the highest (ie, high-quality randomized control trials) to the lowest (ie, expert opinion) (see http://www.jhandsurg.org/authorinfo). Even the Review Section has sought improvement with articles on Current Concepts, Surgical Technique, and Evidence-Based Medicine.

Although I applaud these changes, I am concerned by this statement in Budoff's recent technique article.[1] It says:

> Although closed reduction with percutaneous pinning and immobilization may have been previously recommended for definitive treatment, better results have been achieved with open reduction, ligament repair, and internal fixation, which is now *the current standard of care*.[2,3] [Emphasis mine].

This statement is unsupported by any data. Rather, it references 2 other technique articles neither of which reports even level IV evidence and is reminiscent of the Hans Christian Andersen story about the emperor's new clothes.

Editors should be extremely wary of allowing the phrase "the current standard of care" in a peer-reviewed journal because in our litigious society, this is like filling a room with flammable gas in which a match will later be lit. Pity the poor hand surgeon whose patient receives less than an optimal result after treatment for a perilunate dislocation if he did not follow Budoff's recommendation and later has to explain this suboptimal result to a jury.[4]

Did Budoff really mean to use the phrase "standard of care" or did he mean to say "state of the art"? There is a world of difference between the two: the first is a legal term, whereas the second implies the "latest available." If indeed the *Journal's* editors continue to allow authors to state that a given diagnosis or treatment is the "standard of care," then the editors have a duty to the readers to issue a disclaimer such as the one that prefaces the American Society for Surgery of the Hand Self-Assessment Examinations:

> The material is not intended to represent the only, or necessarily best, methods or procedures appropriate for the medical situation discussed. Rather it is intended to present an approach, view, statement or opinion of the authors . . . which may be helpful, or of interest, to other practitioners.[5]

If Budoff did not mean to use the term "standard of care," then he should clearly state that this was not his intention in responding to this letter.

It appears that the Scientific Article section of the *Journal* mandates that any level IV paper include in its discussion the fact that its conclusions were limited by the quality of the data. On the other hand, the Review Section of the *Journal* seems to allow level V opinions with neither question nor critique. The policy disconnect between the *Journal's* sections recalls the old saying about the right hand not knowing what the left hand is doing—the ultimate irony for a hand journal.

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4. Freshwater MF. "Standard of care" for immediate breast reconstruction. Plast Reconstr Surg 2001;107:1612.
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In Reply:

Thank you for the opportunity to reply to the letter by Dr. Freshwater. Dr. Freshwater takes exception to

the phrase "standard of care" in the following passage:

> While closed reduction with percutaneous pinning and immobilization may have been previously recommended for definitive treatment, better results have been achieved with open reduction, ligament repair and internal fixation, which is now the current standard of care.

This passage from my review was taken from: Grabow RJ, Catalano L III. Carpal dislocations. Hand Clin 2006;22:485–500. The referenced quote read:

> This [closed reduction and percutaneous pinning combined with immobilization] was previously the recommended treatment; however, recent literature has shown a high rate of recurrent instability, carpal incongruity, and arthritis. For most injuries, better results have been achieved with open reduction, ligament repair, and internal fixation than with closed methods, and *open reduction is now the standard of care*. [Emphasis mine]

I sincerely appreciate Dr. Freshwater's comments about inflammatory comments in this (overly) litigious society, but it does not change the fact that certain treatment standards do exist and have already been published in peer-reviewed journals. According to the literature, open reduction and fixation of acute lunate and perilunate dislocations *is* the current standard of care. All of the articles reviewed unanimously recommended open reduction and internal fixation for treating lunate and perilunate dislocations. The scapholunate articulation cannot be reduced closed because of the paradox of Mayfield and Johnson. Accurate carpal alignment needs to be confirmed; this can only be done under direct visualization. According to Weil, Slade, and Trumble, a strong scapholunate interosseous ligament repair is the key to a successful long-term result; obviously, this cannot be performed without an open exposure. Treating these injuries with closed reduction, percutaneous fixation, and immobilization leads to suboptimal results compared with that of open treatment and, according to the literature reviewed, cannot be recommended.

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Nonsurgical Treatment of Fifth Metacarpal Neck Fractures

To the Editor:

I have with great interest read the article by Dr. Hofmeister et al. on the topic of nonsurgical treatment of fifth metacarpal neck fractures (J Hand Surg 2008;33A:1362–1368).

Though the aim of the study was to prospectively compare 2 methods of cast immobilization for the management of this injury, there was no mention made of the potential benefit of "buddy" taping and immediate active movement, which can achieve good joint mobility without the cost of lost mobility and possibly lost income during the casting period. As a recent article on this topic[1] was published prior to submission of the article by Hofmeister et al.,[2] I would be interested in the authors' reason for this omission and to learn how the results of either of their immobilized groups compared with the results of this mobilized group, particularly as cast avoidance would be expected to be more economical both for the individual and for the health care provider.

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2. Hofmeister EP, Kim J, Shin AY. Comparison of 2 methods of immobilization of fifth metacarpal neck fractures: a prospective randomized study. J Hand Surg 2008;33A:1362–1368.

In Reply:

We appreciate the comments of Mr. Povlsen and his interest in our article. Prior to the final editing of the manuscript, a thorough review of the publications related to our manuscript was performed using 2 online search engines (Ovid and PubMed) that search the U.S. National Library of Medicine (MEDLINE)