Daniel K. Resnick, MD

University of Wisconsin School of Medicine and Public Health, Department of Neurosurgery, Madison, Wisconsin

Correspondence:

Daniel K. Resnick, MD, University of Wisconsin School of Medicine and Public Health, Department of Neurosurgery, 600 Highland Avenue, Madison, WI 53792. E-mail: resnick@neurosurg.wisc.edu

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n behalf of the AANS/CNS Joint Guidelines Committee, I am pleased to introduce the updated Guidelines for the Management of Acute Cervical Spine and Spinal Cord Injury. This work describes the "state of the literature" with regard to the treatment of patients with cervical spine and spinal cord injuries and is a useful guide to help clinicians make important decisions in the care of these patients. As with all evidence-based guidelines, recommendations made cannot exceed the strength of the literature, and where there is a lack of evidence or disagreement in the literature, strong recommendations cannot be made. These recommendations represent a foundation for one leg of the "three-legged stool" of evidence-based practice. Having a well-described and vetted summary of the available medical evidence helps to structure decisions also dependent upon clinical judgment and patient desires.

In some cases, the guidelines can provide firm and easily applicable guidance—the (non)use of steroids is an example of such a recommendation in this volume. The authors present a compelling case from high-quality clinical studies demonstrating a greater propensity for such medication to harm rather than benefit patients with spinal cord injuries. In most cases, however, the use of guidelines requires further reflection. Application of clinical judgment to the use of guidelines begins with the determination of whether a guideline applies to your patient. For example, fracture patterns at the craniocervical junction may be complex, may be influenced by congenital abnormalities, and may not fit into the neat boxes selected by the authors for classification. Similarly, application of clinical practice guidelines needs to be balanced against the cost of the application—is aggressive blood pressure augmentation appropriate for an elderly patient with limited cardiac

reserve? Is the evidence for benefit really strong enough to warrant the risk in an individual patient? What about routine imaging for vertebral artery injuries—how many asymptomatic patients need to be exposed to radiation and potentially anticoagulated for radiographic findings that may or may not have clinical importance? These decisions cannot be made by a writing panel, no matter how expert—they require "boots on the ground" judgment, often made with incomplete information. Guidelines provide the best evidence, but only the evidence that exists.

Additionally, application of guidelines needs to be mitigated by patient desires when such desires can be assessed. A decision regarding collar vs halo vs surgical immobilization of odontoid fractures may be substantially guided by patient-related factors and preferences—the same radiographic fracture may be treated differently depending on patient age, community, and preference.

This update of the Guidelines for the Management of Acute Cervical Spine and Spinal Cord Injury is an impressive accomplishment. The evolution of skill in evidence-based review in neurosurgery is evident throughout the document, as every process has been improved over the last decade. The authors have not only updated the guidelines based on new literature, but they have improved the applicability of the guidelines to clinical practice through better question formulation, illustrated graphically the evolution of evidence to allow readers to appreciate what has been learned over the past decade, and incorporated a more sophisticated discussion of the literature to explain areas of continued uncertainty. The reader is encouraged to critically read the supporting evidence for the recommendations in order to appreciate the context of the recommendations as well as the limitations. The authors are congratulated on an outstanding piece of work.

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