Letter by Freeman et al Regarding Article, “Evidence-Based Nursing Review of Cranectomy Care”

To the Editor:

We read with great interest the article by Livesay et al entitled “Evidence-Based Nursing Review of Cranectomy Care.” First, we applaud the authors for this excellent summary of nursing care and for the table of nursing monitoring and discussion of other concerns regarding patients with decompressive craniectomy. The summary they provide is useful, and we hope to educate our nurses in our NeuroICU with this reference. We find the figure especially nice and concise for our nursing education, and we appreciated the Take Home Points and the attention to the largely unstudied nature of many nursing and allied health aspects of these patients, such as use of helmets. We wanted to mention 2 minor points. The first was an observation in our own NeuroICU that we feel is important in the daily nursing management in decompressive craniectomy patients—the use of train of four (TOF) nerve stimulators in critically ill neuroICU patients who require neuromuscular paralysis, such as cis-atricurium and the use of prolonged TOF monitoring.2 Sometimes limb edema can limit the TOF response at the median or ulnar nerves, and occasionally, we have seen nursing perform TOF at or around the eye in attempts to do peripheral cranial nerve VII stimulation and for orbicularis oculi TOF response.3–5 However, TOF stimulation in decompressive craniectomy patients should not be performed over the decompressive craniectomy side if unilateral (such as a large decompressive hemicraniectomy) or either side if bifrontal. We feel it is important to consider adding to the list of issues in these subspecialty neuroICU patients who are perhaps under neuromuscular monitoring. The second point concerns wound monitoring; we also ask our nursing staff to look out for acute turgor or girth of the craniectomy site because of concerns of acute surgical bleeding, but also for cerebrospinal fluid leakage. Overall, we commend the authors’ excellent review on this subject and think it adds greatly to the literature and can improve the nursing care of these patients.

Disclosures

None.

William D. Freeman, MD
Departments of Neurology, Neurosurgery, and Critical Care at Mayo Clinic
Jacksonville, FL

Christina C. Smith, ARNP
Departments of Neurosurgery and Critical Care at Mayo Clinic
Jacksonville, FL

Suzanne M. Brown, BSN, RN, CNRN, SCRN
Department of Nursing at Mayo Clinic
Jacksonville, FL

References

Letter by Freeman et al Regarding Article, "Evidence-Based Nursing Review of Craniectomy Care"

William D. Freeman, Christina C. Smith and Suzanne M. Brown

Stroke. 2015;46:e48; originally published online December 30, 2014; doi: 10.1161/STROKEAHA.114.007926

Stroke is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2014 American Heart Association, Inc. All rights reserved.
Print ISSN: 0039-2499. Online ISSN: 1524-4628

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://stroke.ahajournals.org/content/46/2/e48