Neurosurgical forum
Letters to the editor

Shaving

To The Editor: It is sad to see an academic neurosurgeon abandoning scientific standards in support of his conclusions in the pages of this prestigious journal. Recently, Dr. Ken Winston (Winston KR: Editorial. Neurosurgery and shaving. J Neurosurg 115:669, October 2011) advocated abandoning the shaving of neurosurgical sites based on the work published by Broekman et al. (Broekman MLD, van Beijnum J, Peul WC, et al: Neurosurgery and shaving: what’s the evidence? A review. J Neurosurg 115:670–678, October 2011), analyzing infection rates associated with shaving. It was also discouraging to see these latter authors, in their editorial response, change their original, sound conclusion calling for careful study to one that advises neurosurgeons “to stop this routine.” There are no data given to support any danger from routine shaving of cranial sites. In fact, Broekman and colleagues cite proven concerns with increased surgical time in patients without shaving. They cite a single Class I study showing a decrease in the infection rate for spinal cases only (which cannot be generalized to cranial cases). That study did not show a statistically significant difference and was biased in that the unshaved group had more “complex cases.” The rate of antibiotic use or additional care received because of that complexity was not accounted for by the authors, and the results have yet to be reproduced. The only Class II or better studies evaluated by Broekman et al. and showing possible increased cranial infection with shaving were those comparing patients shaved “preop on ward” with patients unshaved in the operating room. This is similar to the faulty studies used by panels to justify a shaving ban everywhere based on comparisons between clipping the morning of surgery and shaving on the ward the night before surgery. Clearly, a valid study requires a comparison between shaving at the moment of surgery and unshaven surgery in specific and defined groups.

Unfortunately, neither Winston nor Broekman and colleagues mention the results of compliance with measures of the Surgical Care Improvement Project (SCIP) in which infection rates increased as compliance with the SCIP guidelines rose. A similar study by the Agency for Healthcare Research and Quality (AHRQ) found that compliance with SCIP guidelines on shaving, among other things, was not beneficial to patients. After banning razors from the operating room to ensure “appropriate hair removal” (and other measures), infection rates were up nearly 20% in 2 years just as compliance was also up about 15%–20% (Fig. 2 of the JAMA article). Somehow Dr. Winston found the need to “gently” chastise Broekman et al. for using “mollifying language” in their analysis to indicate that “uncertainty” remained and that “properly designed studies are needed.” Dr. Winston properly points out that such a study would need 3000–5000 patients for acceptable statistical power. Yet, he then argues that the type of data provided by Broekman et al. for “any other subject” would induce doctors to abandon a practice. I do not see that I would abandon, for instance, treating vasospasm based on the very limited data presented by Dr. Broekman and colleagues.

Sadly, all of this is a result of continued government and corporate intrusion into the practice of medicine and our unwillingness, as a profession, to reject faulty assertions and substandard studies as a basis for interference in our profession—this as even more published studies are showing that compliance with such standards does not benefit patients in any way and that harm is likely. As accountable care organizations, capitation, pay for performance, bundling, shared savings programs, value-based purchasing, and similar programs grow, doctors will be coerced to lower their standards and provide substandard care to serve the interests of politicians and corporations—often with their own colleagues supporting this agenda.

As a surgeon, I like shaving hair. I like having a naked scalp that gives me more options for an incision and better visualization for planning the surgery. I like removing hair quickly with cheap and new razors so that I can focus on the important parts of the case. I like to avoid slow removal of hair with an expensive electric clipper that may not have been cleaned well, may need batteries, and may not work that day. I like closing quickly without hair getting in the wound or the drapes coming off and creeping into unclean areas. I like being able to rapidly remove hair in the middle of the night on a trauma patient’s head matted with bloody hair. I like knowing that all the staples or stitches will be removed and not hidden by some hair and that the dressing will remain postoperatively. In short, I like my razor. If my patients want a surgeon who doesn’t shave with a razor, there are others in the community who will satisfy that need. There are no data showing that I am hurting my patients by shaving, and there are sound data showing that I may be hurting them by not shaving. There is only one thing that will make me stop insisting on the razor: sound clinical data from a valid study demonstrating a benefit to my patients. Until then, let’s not lower our standards and cajole our colleagues to change their valid scientific conclusions. Congratulations to Dr. Broekman and associates for calling for more studies; you should stick with your first and sound conclusion.

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Disclosure

The author reports no conflict of interest.
RESPONSE: We respect Dr. McKalip’s preference for using a razor, as it is ultimately the individual surgeon’s duty to weigh all pros and cons to provide optimal care to his or her patients. However, we disagree with the claim that there are sound data showing we may be hurting patients by not shaving. The study by Stulberg and colleagues that Dr. McKalip is referring to demonstrates that compliance with SCIP measures is associated with a lower risk of postoperative infection when these SCIP measures are aggregated into a single composite score (OR 0.85, 95% CI 0.76–0.95). The observed beneficial effect appears to be entirely mediated by SCIP measures infection (Inf)-1 through Inf-4, all of which have point estimates of an OR < 1 (although they are not significant on their own). Importantly, SCIP measure Inf-6 (for appropriate hair removal) is entirely consistent with the null hypothesis of no effect (OR 1.00, 95% CI 0.85–1.19). Without commenting on the fact that cranial surgeons were not even included (according to their Table 2), this large study of more than 400,000 patients provides no compelling evidence that shaving confers a protective effect or, conversely, that not shaving may be harmful. We stick to our original recommendation that, until a proper hair removal) is entirely consistent with the null hypothesis of no effect (OR 1.00, 95% CI 0.85–1.19). Without commenting on the fact that cranial surgeons were not even included (according to their Table 2), this large study of more than 400,000 patients provides no compelling evidence that shaving confers a protective effect or, conversely, that not shaving may be harmful. We stick to our original recommendation that, until a properly designed, well-powered randomized controlled trial demonstrates a significant benefit, shaving should be considered a clinical intervention and as such—all other things being equal—should be avoided. We realize this may not always be feasible in clinical practice.

REFERENCES


REFERENCE


Incidental low-grade gliomas


Supratentorial diffuse low-grade gliomas (LGGs) in adults are rarely discovered incidentally on brain imaging, although their detection will probably increase as access to brain imaging broadens worldwide. In the present study, Potts and colleagues analyzed the effects of early resection on incidental LGGs. Their results agreed with those of an earlier study focusing on long-term outcomes in patients harboring an incidental LGG, which was conducted by our French glioma study group (Réseau d’Étude...