

## Letter to the Editor

Dear Sir,

We read with interest the article by Hill *et al.* (1993) entitled 'Pressure exerted by head bandages used in otologic surgery', published in the *Journal of Laryngology and Otology* in December of 1993.

As is the practice at many otologic centers in the United States we continue to utilize a standard mastoid dressing post-operatively in patients undergoing tympanoplasty, mastoidectomy and translabyrinthine acoustic neuroma excision. Indeed, we use the dressings to bolster ear packing and prevent post-operative hematoma. At our center, the dressings are applied by the surgeon or assistant surgeon in a fairly snug fashion at the end of the case and we have seldom experienced a wound hematoma. The article by Hill *et al.* reinforces the need for a tight dressing by showing via balloon catheter pressure transducer studies that only tightly applied bandages achieved a mean bandage pressure sufficiently high enough to overcome the theoretical minimum pressure required to prevent hematoma formation (Ganong, 1977). In their conclusion, the authors state that in order for a bandage to achieve a compressive effect, it should be applied tightly so as to induce a headache. Although we agree that mastoid dressings should be applied in a snug fashion, we believe that the conclusion of a study such as the kind presented by Hill *et al.* should be tempered with a warning regarding the known dangers of very tight post-operative mastoid dressings. We personally have seen a case of ischemic necrosis of the forehead skin in a patient secondary to the overzealous application of a pressure bandage. The patient devel-

oped an unsightly scar as a result of the iatrogenic wound and eventually required a plastic surgery procedure to correct the scar. The dangers of tight dressings are echoed in a recent report by Rhys-Evans (1993), of three similar cases of pressure dressing induced skin necrosis.

We feel that in the application of mastoid dressings, the bandage should be applied in two planes, with care taken to distribute pressure evenly across the head. In addition, an effort should be made to avoid centering the ribbon gauze knot over the bare skin of the forehead or temporal regions.

Sincerely,

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### References

- Hill, J., Allan, W., Malhan, D., Williams, E. D. (1993) Pressure exerted by head bandages used in otological surgery. *The Journal of Laryngology and Otology* **107**: 1110–1112.  
Ganong W. F. (1977) *Review of Medical Physiology*. 8th Edition. Lange, New York, pp 435–438.  
Rhys-Evans, P. H. (1993) Short Communication: Knot to be condemned. *The Journal of Laryngology and Otology* **107**: 33–34.