Buried Hair in Scalp Closure
Is It a Problem?

Thomas Ray Vecchione M.D.
San Diego, California

ABSTRACT / This paper addresses itself to the question of what happens to buried hair in a wound. A case is reported of hair which was buried 5 months prior to a scar revision. The pathologic description is accompanied by discussion of hair strands and their dissolution.

Incisions in the temporal and postauricular scalp are at risk to be closed with the inclusion of one or more strands of hair. The problem becomes especially poignant when closing face-lift incisions or emergency room scalp lacerations. Except for the complete shave of a neurosurgical prep, the usual field in scalp surgery is beset with bothersome strands of uncontrolled hair that are occasionally insinuated into the wound as the sutures are being placed.

Case report

A 25-year-old male motorcycle driver was thrown to the pavement sustaining multiple forehead and scalp lacerations. At a nearby emergency room the wounds were closed after a hurried debridement. The emergency room physician's operative note was, "The scalp was closed with very little shaving because of the rapid bleeding." When questioned further, the physician stated that he probably did include several strands of hair in the depths of the sutured forehead and scalp lacerations. The wound healed without infection or delay.

The patient requested revisional surgery even though excessive scar tissue was not a problem. The scar tissue did not appear grossly abnormal 5 months after the accident. Surgical revision was performed. No inclusion cysts, purulent collections, or gross foreign bodies were encountered. During this scar revision, several sections of the excised scar of the forehead and scalp were submitted for pathological examination.

Address reprint requests to Thomas R. Vecchione, M.D., Division of Plastic Surgery, University of California at San Diego, 306 Walnut #36, San Diego, California 92103.
Pathological description

A section through the scar where several strands of hair had been buried is shown in Fig. 1. Hematoxylin and eosin stain demonstrates an intact buried hair and one in dissolution. The hair (keratin) is seen as polarizing bodies (1). The intact hair on the left is surrounded by a thin shell of epithelial cells. The reactive fibrous tissue surrounding this is filled with lymphocytes and some scattered giant cells. Just to the right of this buried hair is a dissolving hair surrounded by multiple giant cells. The macrophages are phagocytizing disrupted keratinous material.

Scar tissue infiltrating the subdermal region surrounds the buried hair. The hyperreactive tissue surrounding the hair demonstrates the reaction to foreign bodies (probably the contaminants coating the hair itself).

---

Fig. 1. Microscopic section through 5-month-old wound containing buried hair. One hair on the left is completely intact with surrounding cell reactivity. The hair on the right is undergoing dissolution and phagocytosis by macrophages.