
Reverse beveling to improve wound edge apposition



Kourosh Beroukhim, MD, Lindsay R. Sklar, MD, and Daniel B. Eisen, MD
Sacramento, California

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SURGICAL CHALLENGE

Minimizing the width of surgical scars requires tension-free approximation of skin edges in an everted position to offset the contractile forces that pull apart skin edges during wound healing.¹ Perpendicular wound edges without bevels toward the center of the wound, which would obstruct direct approximation of the dermis, are advocated for in classic surgical teachings.² However, the tendency of the scalpel handle to fall toward the surgeon's dominant hand often results in unintentional beveling of the skin edges toward the center of the wound. In addition, even perpendicular wound edges frequently remain difficult to evert.

SOLUTION

Creating incisions with a reverse bevel (away from the center of the wound) facilitates tension-free approximation of skin edges in an everted position (Video 1). This action can be achieved by angling the edge of the scalpel away from the center of the wound and can be further enhanced by exerting lateral traction on the skin during creation of the incision. For beginner surgeons, aiming for a reverse bevel minimizes the risk for unintentional beveling toward the center of the wound. The reverse bevel positions superior wound edges closer to one another in comparison with the deepest edges of the wound (Fig 1, A). When buried, vertical mattress sutures are subsequently used to approximate the dermis, the superior wound edges naturally fall together in an everted position (Fig 1, B). Care must be taken to avoid an extreme reverse bevel, which might increase the difficulty of placing deep dermal sutures without creating prominent cutaneous dimples.

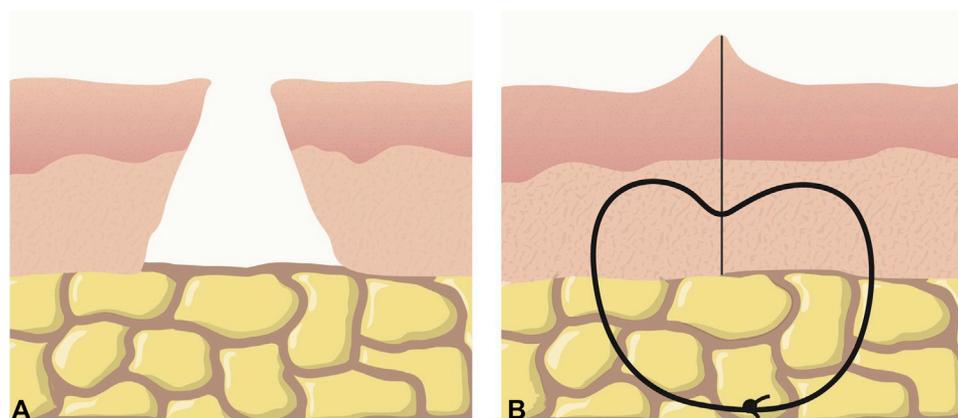


Fig 1. A, Incision with a reverse bevel away from the center of the wound. B, Tension-free approximation of wound edges in everted position.

From the Department of Dermatology, University of California, Davis, Sacramento.

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Reprint requests: Kourosh Beroukhim, MD, Department of Dermatology, University of California, Davis, 3301 C St, Ste 1400 Sacramento, CA 95816. E-mail: beroukhimk@gmail.com.

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