Clinical Pearl: A Simple and Effective Technique for Improving Surgical Closures for the Early-Learning Resident

Sonal A. Parikh, MD; Brett Sloan, MD

Approximation of wound edges following excision can be challenging for the early-learning resident. We propose a technique that involves drawing straight lines perpendicular to the fusiform plane laid out for any simple, intermediate, or complex linear wound closure, which will lead to improved overall cosmesis and patient satisfaction.  


Practice Gap
For first-year dermatology residents, dermatologic surgeries can present many challenges. Although approximation of wound edges following excision may be intuitive for the experienced surgeon, an early trainee may need some guidance. Infusion of anesthetics can distort the normal skin field or it may be difficult for the patient to remain in the same position for the required period of time; for example, an elderly patient who requires an excision on the posterior aspect of the neck may be unable to assume the same position for the full duration of the procedure. We offer a simple and effective technique for early-learning dermatology residents to improve surgical closures.

**FIGURE 1.** A typical preexcisional fusiform sketch (A) with added perpendicular markings indicating the approximated wound edges (B) for removal of a melanoma in situ with a 5-mm margin of normal skin.
FIGURE 2. Surgical site after removal of a melanoma in situ (A). The perpendicular markings were utilized to assist in approximation of the wound edges with buried deep sutures, and the wound was closed using 3-0 poliglecaprone 25 sutures (B). 4-0 Polypropylene sutures in a simple running fashion were used for the final closure (C).

The Technique
We propose drawing straight lines using a sterile marking pen perpendicular to the fusiform plane laid out for any simple, intermediate, or complex linear closure (Figure 1). These lines can then be used as scaffolding for the surgical closure (Figure 2). We recommend drawing the lines at the time of initial planning when the site of excision is in the normal anatomic position.

Practice Implications
By creating a sketch with perpendicular lines, approximation of skin edges and surgical closures may become easier for the learning resident. Patients also can rest more comfortably during the procedure, and the overall cosmesis, healing, and outcome of the procedure may improve. The addition of a sterile marking pen to the surgical tray may aide in highlighting faded pen markings for easier visualization after cleansing of the surgical site.