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## PROGRESS AND TECHNIQUES IN COSMETIC WOUND CLOSURE

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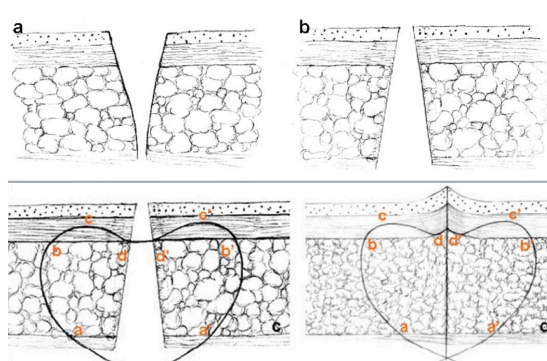
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**Background:** A successful wound suture should provide a firm tension-relieving closure, good wound-edge eversion, minimal intradermal extraneous materials and unobvious postoperative scar. However, this is not always achieved with a traditional standard technique.

**Methods:** Combined with mechanisms of wound healing, principles of plastic surgery and progresses of wound closure, the authors describe a modification of a wound closure method that can rapidly and reliably achieve these results. In this method, a wedge-shaped excision was adopted to obtain a trapezoid pattern transect, after which a modified fully buried vertical mattress suture technique was used to close the wound. The surgical sutures and needles were optimized in these techniques. These techniques were compared with the standard excision and suture techniques used for the same patient at different times after surgery.

**Results:** These modified techniques were used in thousands of wound closures in clinic. The wedge-shaped excision can facilitate good wound-edge eversion, and the modified fully buried vertical mattress suture can provide firm tension relief, optimal apposition and minimal intradermal extraneous materials. Compared with conventional excision and suture techniques, the described techniques brought about a better outcome in terms of hypertrophic scar prevention.

**Conclusion:** The described modified technique seems to be more efficient than conventional procedures used to prevent hypertrophic scar formation and it's worth popularization.



**Figure 1:** Techniques of wedge-shaped excision and modified fully buried vertical mattress suture. (a) conventional excision; (b) wedge-shaped excision; (c) trails of modified fully buried modified fully buried vertical mattress suture; (d) after ligation