
A modified technique for high-tension wound closure



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SURGICAL CHALLENGE

Closure of a gaping wound in layers is challenging. Numerous techniques have been recommended, including the double-loop dermal stitch¹ or subcutaneous inverted cross mattress stitch.² An assistant using mosquito forceps for knot pinching in a tension closure or loop suture is more commonly applied technique in wound suturing and aesthetic surgery (eg, minimal access cranial suspension facelift). We previously used to pinch the first knot with mosquito forceps (Fig 1, A1) and hold the knot in place until the next tie was completely fixed (Fig 1, A2). Although the suture was secured, the disadvantages included easy disruption of the suture material by the horizontal grooves on the inner surface of the slender jaw and difficulty removing the forceps, as the second knot was tightly tied on the tip (Fig 1, A3).

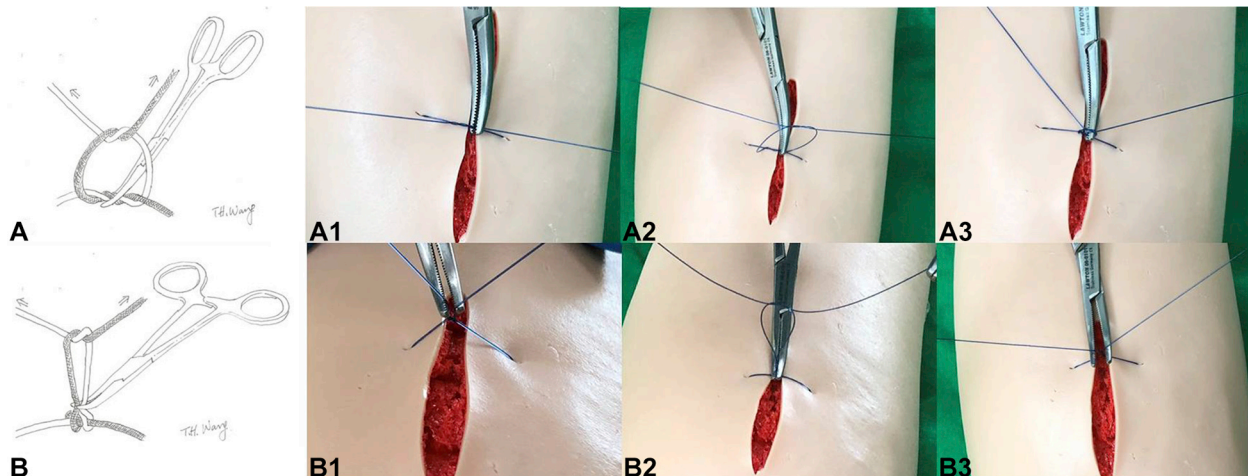


Fig 1. Comparison between the previous and new modified method for performing high-tension sutures. **A** and **A1-A3**, We used to pinch the first knot directly. With this technique, removal of the mosquito forceps can lead to the disruption of the sutures. **B** and **B1-B3**, We now, instead, pinch the suture lines just above the first knot, which allows for the mosquito forceps to slide away more smoothly without disrupting the sutures.

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SOLUTION

We present a modified pinch technique with mosquito forceps (Fig 1, *A* and *B*). In step 1, the first tie is made and the wound approximated. In step 2, the tip of the mosquito forceps is turned upward, and an assistant pinches both suture lines just above the knot (Fig 1, *BT*). In this way, the knot is not directly pinched, the first knot is just held in place! In step 3, the second tie is made and the knot slid to the mosquito forceps (Fig 1, *B2*). Then, the mosquito forceps can be slid smoothly away to complete the suture ties (Fig 1, *B3*).

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