

A granny sliding knot for high-tension closures



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SURGICAL CHALLENGE

Closing wounds under high tension without relying on tissue creep or mechanical advantages, including pulley stitches or assistants, can be difficult.

SOLUTION

The granny sliding knot is a robust and reproducible method of closing wounds in areas of high tension by using either monofilament or multifilament absorbable suture (see [Supplemental Video 1](#); available at <http://www.jaad.org>).

The process entails 6 steps. Step 1 is to place a buried vertical mattress stitch.¹ Step 2 is to throw 2 repetitive loops of suture in the same direction. In step 3, cinch the knot under tension and rest it against the proximal wound edge. Step 4 is to throw 1 loop of suture in the same direction as the first 2 throws to generate a granny knot ([Fig 1](#)). In step 5, use the dominant hand to tie the granny sliding knot by simultaneously pulling proximally and toward the lateral wound edge in 1 continuous smooth motion.² The knot is secured as the skin edges are approximated; it must remain in contact with the proximal wound edge while the surgeon tries to prevent premature locking. In step 6, continuous or alternating throws are performed to achieve the desired knot security. A large number of throws is unnecessary, as the granny sliding knot provides excellent knot security.

In summary, we present a method for closing high-tension wounds that does not require mechanical advantages, which can be dangerous to assistants, time-consuming, and technically challenging. The granny sliding knot is safe, secure, and reproducible. It facilitates closure of high-tension wounds without knot slippage or suture breakage after placement of a traditional buried vertical mattress suture.

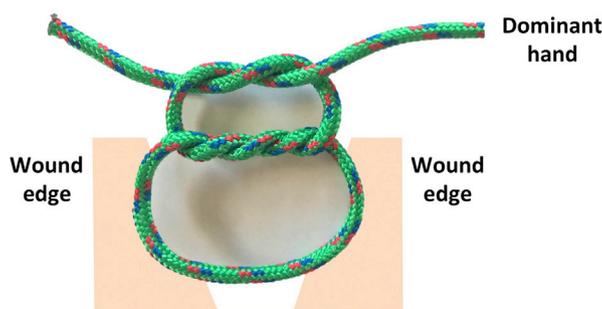


Fig 1. Schematic representation of the granny sliding knot using rope. As the knot is tied with 1 continuous and smooth motion from the dominant hand, the granny knot slides down the suture until it becomes secured as the skin edges are approximated.

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