

Wound Closure:

Ideally, the best wound closure would be quick, painless, cheap and produce little scarring or infection. The available options include:

- Sutures
- Staples
- Tapes
- Glue

Sutures

- Nylon has good tensile strength, low tissue reactivity and the knot holds well
- Polypropylene (Prolene) has the best strength but knots slide
- Silk has the best knot security but the most tissue reactivity
- Absorbable suture dissolve with time.
 - Retain strength for about a week to months
 - Should be used for deeper lacerations to close dead space/relieve skin

Adhesive Tapes

Steri-strips are less reactive than staples; the tincture of benzoin needed to make them stick may increase the risk of wound infections. They do not withstand pressure very well. Shouldn't be used for primary closure of wounds, but can be helpful after sutures have been removed.

Tissue Adhesives

Dermabond (2-octylcyanoacrylate) has great utility in small lacerations that are not under tension. It is quick to apply, produces minimal scarring, painless and has bacteriostatic properties. It should not be applied to wounds which are under tension, near joints, near the eyes or in hair.

When should you close a wound? Usually within 24 hours.

Delayed closure: On initial presentation the wound is cleaned and dressed and closed at a later time. This is usually used in contaminated wounds.

Secondary closure: Allowing the wound to heal on its own. Reserved for more contaminated wounds, but leaves more unsightly scarring.

Video Links:

- Simple Interrupted: [ALiEM Video](#) (3 min)
- Corner Suture: [ALiEM Video](#) (1 min)
- Buried Sutures: [ALiEM Video](#) (3 min)
- Horizontal Mattress: [ALiEM Video](#) (3 min)
- Vertical Mattress: [ALiEM Video](#) (3 min)
- All ALiEM suture videos: <http://www.aliem.com/videos/>