

Laceration: Considerations for Closure

Methods:

- Skin adhesives or Clozex® are options for simple wounds with minimal tension and no hair
 - Topical antibiotics should not be used with skin adhesives (exception: if using Clozex®, ointment may be applied between straps)
- Sutures are preferred for lacerations under tension
 - Minimum 4 knots for absorbable, 4-5 knots for nonabsorbable
- When possible, use simple interrupted suture technique. Mattress sutures may be indicated to close wounds under increased tension (i.e., across joints or widely gaping wounds), though may result in more prominent scars.

Materials:

- Considerations such as family's ability to follow-up, infection risk, anticipated difficult suture removal (e.g., need for sedation), etc. may aid in selecting absorbable versus nonabsorbable sutures
- If deep closure is needed, Vicryl®, Monocryl® or polydioxanone (PDS) are preferred
- Tapered needles are preferred in delicate tissue such as head or neck to reduce tissue trauma, though availability may differ between settings
 - Note: tapered needles are indicated by a circle with dot on suture package; cutting needles have a triangular marking on suture package
- Headband magnifying glasses offer better visualization
- Standard non-sterile gloves are recommended (i.e., sterile gloves are not required)

Location of Laceration	Suture Material	Size	Removal / Follow-up
Scalp	Consider staples or hair apposition	n/a	7-10 days (staples)
	Fast absorbing* -or- Slow absorbing**	3-0 or 4-0	n/a
Face	Fast absorbing*	5-0 or 6-0	n/a
	Slow absorbing** on a tapered needle <i>if available</i> -or- Nonabsorbable*** for older / more cooperative patients	6-0 or 7-0	5-7 days
Oral mucosa	Slow absorbing** if sutures needed <i>Consult OMFS if unsure</i>	4-0 or 5-0	n/a
Tongue	Slow absorbing** if sutures needed <i>Consult OMFS if unsure</i>	3-0 or 4-0	n/a
Ear/nose	Slow absorbing**	5-0 or 6-0	n/a
Torso	Nonabsorbable*** if under tension	4-0 or 5-0	7-10 days
	Slow absorbing** if not under tension		n/a

Arms/legs	Nonabsorbable*** if over joint or other high-tension area <i>Consider joint immobilization for the first few days to prevent dehiscence</i>	4-0 or 5-0	7-14 days (depending on tension)
	Slow absorbing**		n/a
Hands/feet	Nonabsorbable*** in areas with high tension	Hand, fingers, toes: 4-0 or 5-0	7-14 days (depending on tension)
	Consider slow absorbable** in hand / fingers	Soles: 3-0 or 4-0	n/a

***Fast absorbing:**

- Fast gut (5 - 7 days) comes with cutting needle only – *for less delicate areas*
- Plain gut 5-0 (7 - 10 days) with tapered needle – *for delicate areas*

****Slow absorbing:**

- Chromic gut (10 - 14 days)
- Vicryl Rapide® (7 - 10 days),
- Monocryl® (30 days)
- Vicryl® (30 days)

*****Nonabsorbable:**

- Prolene®
- Ethilon® (nylon)