Skin suture removal

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Revised: April 21, 2026

Introduction

A practitioner can use skin sutures to close a laceration or surgical wound. The timing of skin suture removal depends on the location of the sutured incision and the condition of the wound (absence of inflammation, drainage, and infection).[1] (See *Timing of skin suture removal.*) The goal during skin suture removal is to remove skin sutures from a healed wound without damaging newly formed tissue. Removal doesn't typically require sterile technique. The practitioner can usually use no-touch technique unless the patient's condition warrants sterile technique.[2] The technique used for skin suture removal depends on the method of suturing. A practitioner usually removes skin sutures. However, in many facilities, a nurse can remove them according to the practitioner's order.

TIMING OF SKIN SUTURE REMOVAL	
The table below lists the general timing of skin suture removal, based on the wound's location and the practitioner's opinion and experience.[1]	
Wound location	**Timing of removal**
Arm	7–10 days[1]
Face	3–5 days[1]
Hand or foot	10–14 days[1]
Leg	10–14 days[1]
Palm or sole	14–21 days[1]
Scalp	7–10 days[1][3]
Trunk	10–14 days[1]

Equipment

- Antiseptic cleaning agent
- Facility-approved pain assessment tool
- Gloves
- Light source
- Sterile 4″ × 4″ (10- × 10-cm) gauze pads
- Sterile skin suture removal kit (sterile forceps or hemostat, sterile curved-tipped skin suture scissors)
- Optional: adhesive remover, adhesive strips, other personal protective equipment, prescribed pain medication, sterile drapes, tape

Preparation of Equipment

Inspect all equipment and supplies. If a product is expired, is defective, or has compromised integrity, remove it from patient use, label it as expired or defective, and report the expiration or defect as directed by your facility.

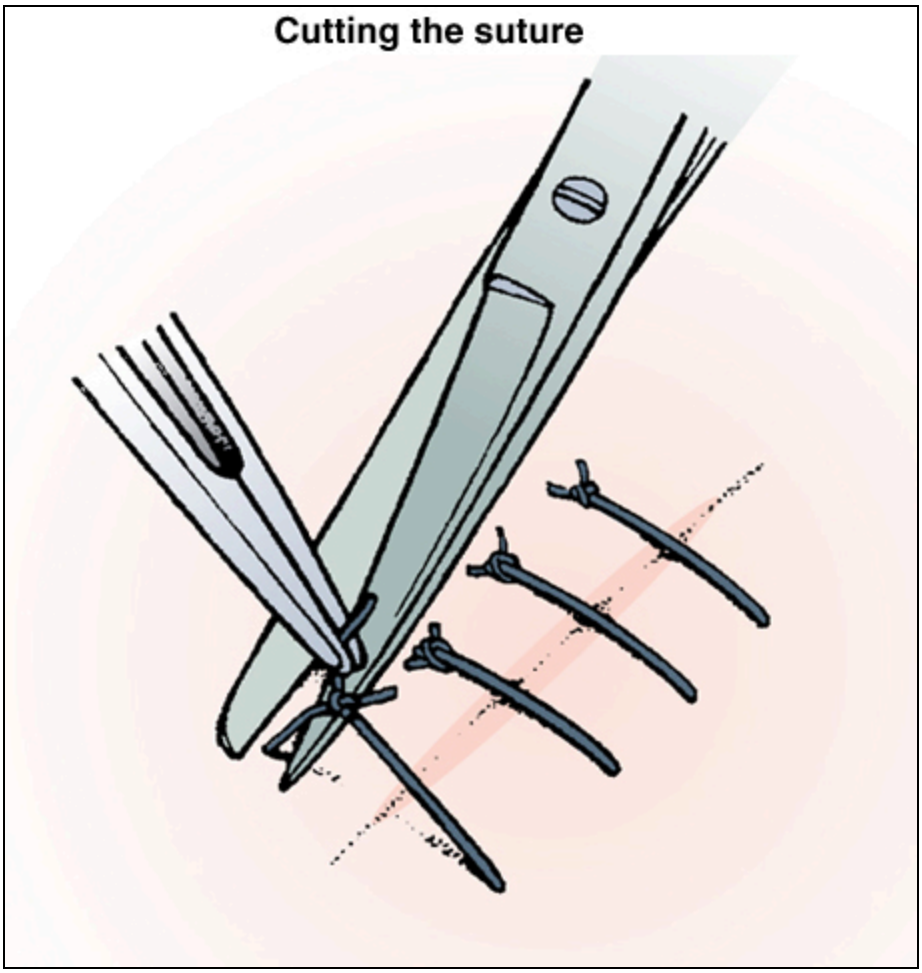
Implementation

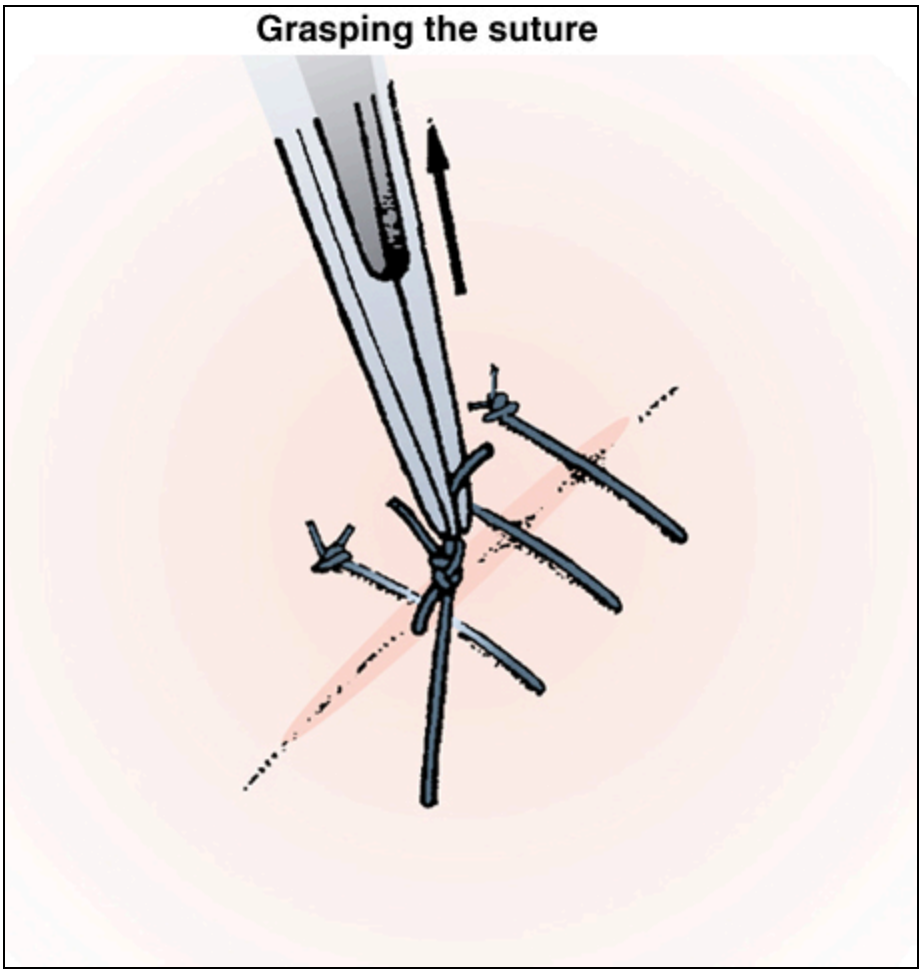
- If your facility allows you to remove skin sutures, verify the practitioner's order *to confirm the exact timing and details of the procedure.*[4]
- Review the patient's medical record for any history of allergies, especially to adhesive tape, topical solutions, or medications.
- Gather and prepare the necessary equipment and supplies.
- Perform hand hygiene.[5][6][7][8][9][10]
- Confirm the patient's identity using at least two patient identifiers.[11]
- Provide privacy.[12][13][14][15]
- Explain the procedure to the patient and family (if appropriate) according to their individual communication and learning needs *to increase their understanding, allay their fears, and enhance cooperation.*[16] Tell the patient to expect to feel a slight pulling or tickling sensation—but little discomfort—during skin suture removal. Reassure the patient that removing the supporting skin sutures won't weaken the incision line, because the wound is healing properly.[4]
- Screen for and assess the patient's pain using facility-defined criteria that are consistent with the patient's age, condition, and ability to understand.[17]
- Treat the patient's pain, as needed and ordered, using nonpharmacologic, pharmacologic, or a combination of approaches. Base the treatment plan on evidence-based practices and the patient's clinical condition, past medical history, and pain management goals.[17]
- Raise the bed to waist level before providing care *to prevent caregiver back strain.*[18]
- Perform hand hygiene.[5][6][7][8][9][10]
- Assist the patient into a comfortable position. Ensure that the patient's position doesn't create tension on the suture line. *Because some patients experience nausea and dizziness during skin suture removal,* have the patient recline if possible.
- Ensure that the lighting is adequate.
- Perform hand hygiene.[5][6][7][8][9][10]
- Put on gloves and, as needed, other personal protective equipment *to comply with standard precautions*.[19][20][21]
- If the patient's suture area is covered with a dressing, carefully remove the dressing *to prevent skin stripping and tearing.* Discard the used dressing in an appropriate receptacle.[21] Use adhesive remover, if needed and appropriate, *to remove any old adhesive from the patient's skin*.
- Assess the patient's suture area:
  - Note any redness, warmth, swelling, or drainage, *which may indicate infection.*[4]
  - Be aware that a localized reaction to the skin sutures may cause some faint erythema. This finding is normal, but you must differentiate it from pathologic erythema.
  - Note whether the wound margins appear well approximated.[4]
  - Report any abnormal findings to the practitioner. *If the wound isn't adequately healed, the skin sutures may need to remain in place longer. Any evidence of infection may require pharmacologic intervention.*

- Remove and discard your gloves.[21]
- Perform hand hygiene.[5][6][7][8][9][10]
- Open the sterile skin suture removal kit, maintaining asepsis.
- Place sterile drapes around the site or under the area, if appropriate, *to provide a protective barrier.*[4]
- Perform hand hygiene.[5][6][7][8][9][10]
- Put on gloves *to comply with standard precautions*.[2][19][21]
- Gently clean the suture line using an antiseptic cleaning agent *to decrease the number of microorganisms present, thereby helping to reduce the risk of infection and to allow for visualization of all sutures and ease skin suture removal.*[4]
- With your nondominant hand, use the sterile pair of forceps or the hemostat to grasp the skin suture near the knot and then gently lift the knot slightly up off the patient's skin.[4]
- Grasp and cut each skin suture using a sterile curved-tipped skin suture scissors at the appropriate place according to the suture type and then remove it. Proceed according to the type of skin sutures you're removing. (See *Methods for removing sutures*.) *Because the visible part of a skin suture is exposed to skin bacteria and is considered contaminated,* be sure to cut sutures at the skin surface on one side of the visible part of the suture. Remove the skin suture by lifting and pulling the visible end up off the patient's skin *to avoid drawing the contaminated portion back through subcutaneous tissue.*[4]

METHODS FOR REMOVING SUTURES

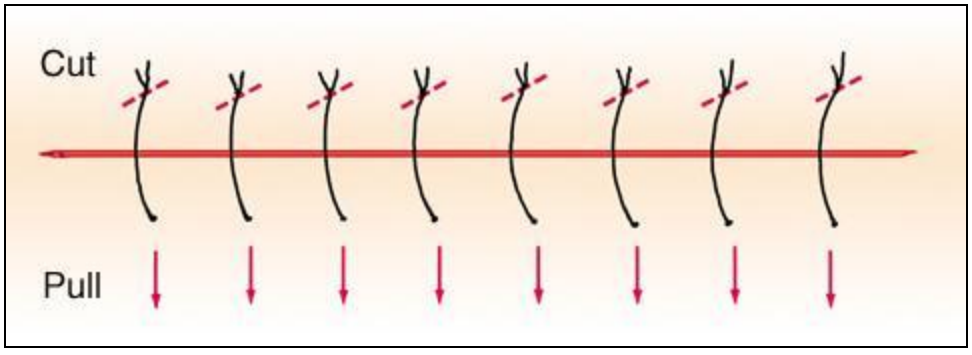
Suture removal techniques usually depend on the type of skin sutures present. The illustrations below show the grasping and cutting of skin sutures as well as removal steps for four common suture types. Keep in mind that for all skin suture types, the proper removal technique requires grasping and cutting sutures in the correct place *to help avoid pulling the exposed (thus contaminated) suture material through subcutaneous tissue.*[4]


Cutting the suture



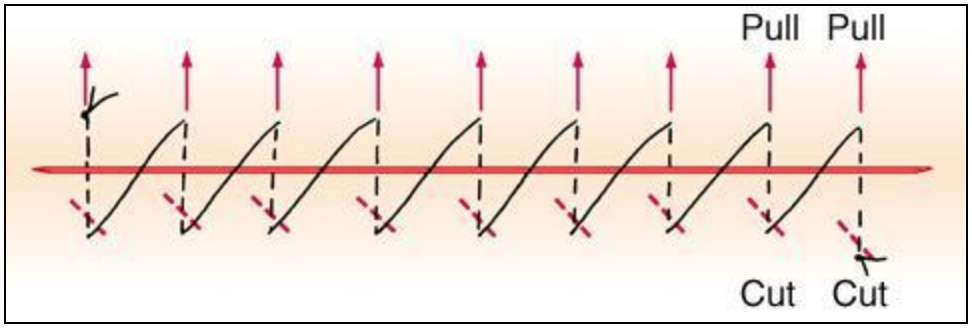
Plain interrupted skin sutures

To remove plain interrupted skin sutures, use sterile forceps or a sterile hemostat to grasp the knot of the first suture and raise it off the patient's skin. *Doing so exposes a small portion of the skin suture that was below skin level.* Place the rounded tips of sterile curved-tipped skin suture scissors against the patient's skin and cut through the exposed portion of the skin suture. While still holding the knot with the forceps or hemostat, pull the cut skin suture up and out of the patient's skin in a smooth, continuous motion (as shown below) *to avoid causing pain.* Discard the skin suture. Repeat the process for every other skin suture (alternating sutures) initially. If the patient's wound doesn't gape, remove the remaining skin sutures, as ordered.[4]



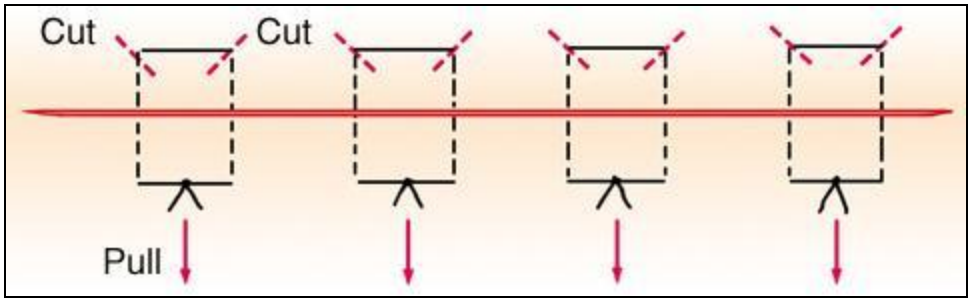
Plain continuous skin sutures

To remove plain continuous skin sutures, cut the first suture on the side opposite the knot. Next, cut the same side of the next skin suture in line. Then lift the first skin suture out in the direction of the knot (as shown below). Proceed along the suture line, grasping each skin suture where you grasped the knot on the first one.[4]



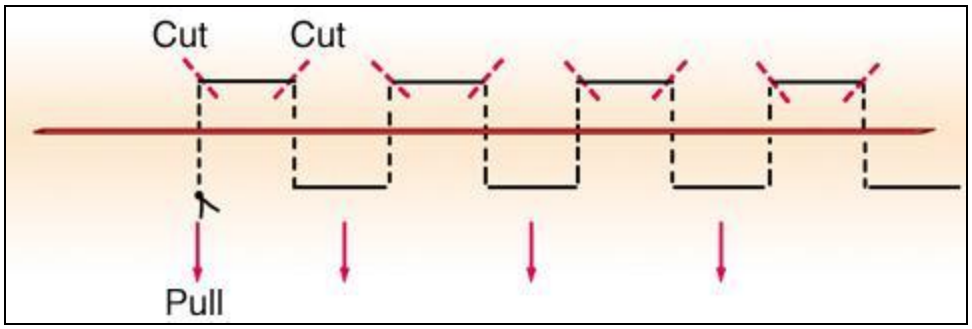
Mattress interrupted skin sutures

To remove mattress interrupted skin sutures, remove the small, visible portion of the suture opposite the knot, if possible, by cutting it at each visible end and lifting the small piece away from the patient's skin (as shown below) *to prevent pulling it through and contaminating subcutaneous tissue.* Then remove the rest of the skin suture by pulling it out in the direction of the knot. If the visible portion is too small to cut twice, cut it once and pull the entire skin suture out in the opposite direction. Repeat these steps for the remaining skin sutures.[4]



Mattress continuous skin sutures

To remove mattress continuous skin sutures, follow the procedure for removing mattress interrupted skin sutures, first removing the small visible portion of the suture, if possible, *to prevent pulling it through and contaminating subcutaneous tissue.* Then extract the rest of the skin suture in the direction of the knot (as shown below).[4]

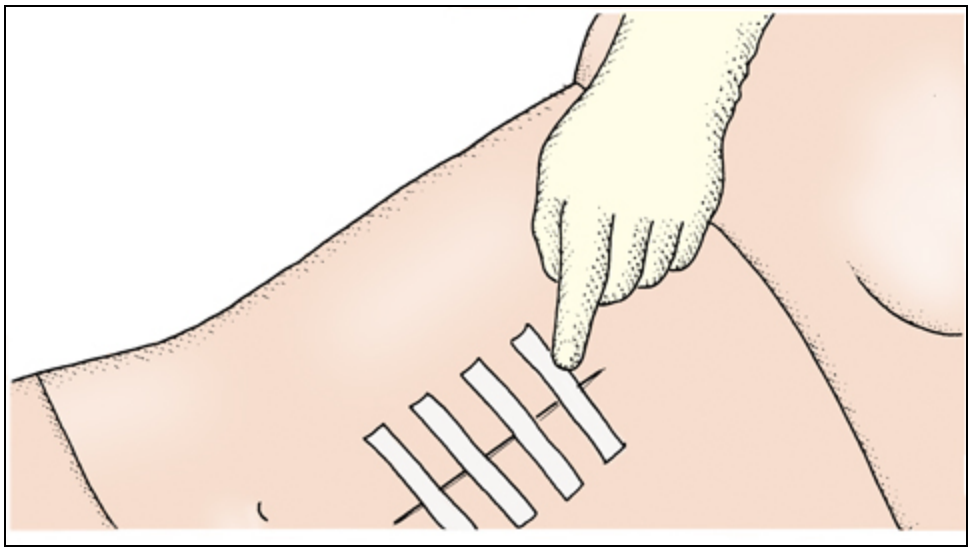


- Remove every other skin suture *to maintain some support for the incision site and ensure that the incision site heals adequately.* Then go back to the starting position and remove the remaining skin sutures, as ordered.[4]
- After removing the skin sutures, gently clean the patient's incision site using gauze pads soaked in an antiseptic cleaning agent.[4]
- Assess the patient's incision site for the approximation of wound margins *to determine whether the application of adhesive strips is needed.*[4]
- Apply adhesive strips, as needed.[4] (See *Applying adhesive strips*.)

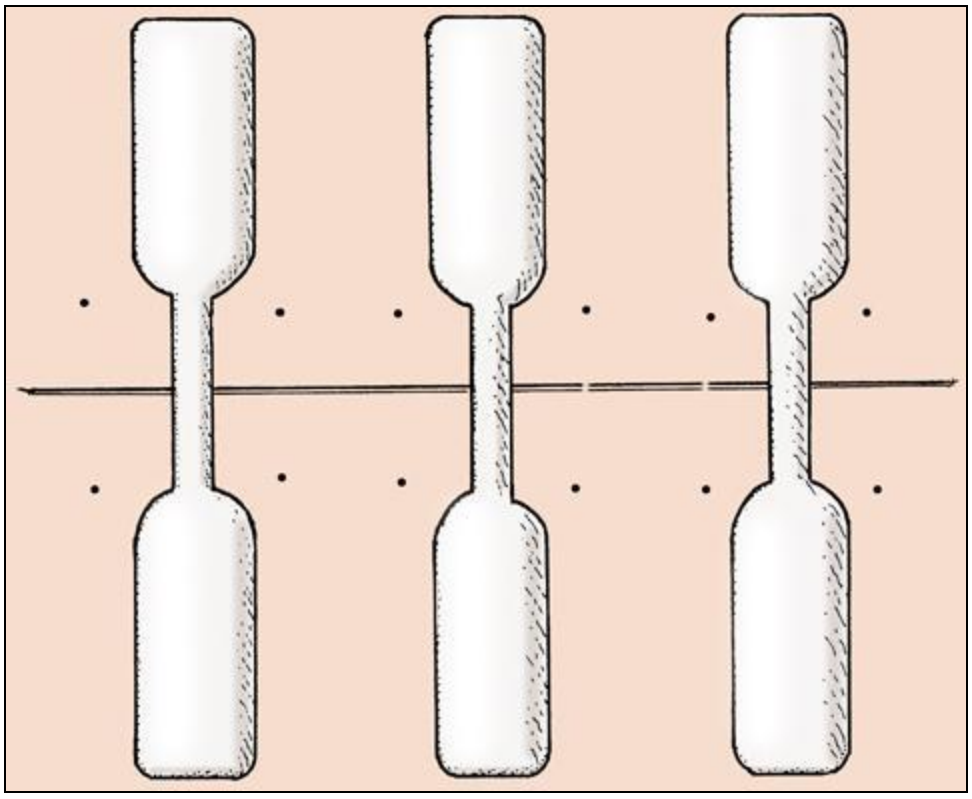
APPLYING ADHESIVE STRIPS

Some incision sites may still be gaping or incompletely healed upon skin suture removal. In such cases, use these steps to apply adhesive strips:

- Apply alcohol-free skin protectant just to the outside of the patient's incision site according to the manufacturer's instructions.[4] [22]
- Allow the skin protectant to become tacky before applying the adhesive strips *to ensure that they stick to the patient's skin.*
- Bring the edges of the patient's skin together using your fingers, as needed.[22]
- Attach one end of an adhesive strip to one side of the incision line and then gently pull the adhesive strip across the incision line to attach it on the opposite side. Don't pull adhesive strips tightly *to avoid skin shearing, blistering, and loss of adhesion from excessive tension.*[22]
- Continue to place adhesive strips about ½" (1.3 cm) apart (as shown below) or closer depending on the size and location of the incision line.



Butterfly adhesive strips are sterile, waterproof adhesive strips that have a narrow, nonadhesive bridge connecting the two expanded adhesive portions (as shown below). These strips help close small wounds and assist with healing after skin suture removal.



- Assess the need for a dressing or covering. Apply one, as needed.[4]
- Return the bed to the lowest position *to prevent falls and maintain the patient's safety.*[23]
- Discard used supplies in appropriate receptacles.[21] If you used reusable skin suture scissors and forceps or a hemostat, prepare them for reprocessing.[24] [25]

- Remove and discard your gloves and, if worn, other personal protective equipment.[21]
- Perform hand hygiene.[5][6][7][8][9][10]
- Report any abnormal findings to the practitioner.[4]
- Reassess and respond to the patient's pain by evaluating the response to treatment and progress toward pain management goals. Assess the patient for any adverse reactions and risk factors for adverse events that may result from treatment.[17]
- Perform hand hygiene.[5][6][7][8][9][10]
- Document the procedure.[26][27][28][29]

Special Considerations

- If the patient has retention sutures and regular skin sutures in place, check the practitioner's order for the sequence in which you should remove them. *Because retention sutures link underlying fat and muscle tissue and give added support to a patient with obesity or one with a slow-healing wound,* they usually remain in place for 14 to 21 days.[4]
- If the patient's wound dehisces during skin suture removal, keep the remaining sutures in place, apply adhesive strips or butterfly adhesive strips *to help support and approximate the wound edges,* and call the practitioner immediately to assess the wound.[4]
- Adhesive strips generally are left in place for 3 to 5 days or as ordered.[4]

Patient Teaching

Instruct the patient and family (if appropriate) on how to remove the dressing and care for the wound at home, as appropriate. Inform them about the practitioner's guidelines regarding showering. Instruct the patient and family to immediately call the practitioner if the wound opens, drains, or becomes inflamed. Explain that the redness around the patient's incision site should gradually disappear and that, after a few weeks, only a thin line should be visible. When sun exposure is likely, instruct the patient and family to keep the wound covered initially and then to use a sunblock product on the healed wound for 3 to 6 months when sun exposure is likely *to help protect the scar.*[30]

Complications

Complications associated with skin suture removal may include:

- infection
- loss of range of motion or sensory perception
- abnormal appearance
- wound dehiscence
- incomplete removal.[4]

Documentation

Documentation associated with skin suture removal includes:

- assessment findings before and after skin suture removal
  - incision site appearance
  - approximation of wound margins
  - presence or absence of redness, warmth, swelling, or drainage
- date and time of skin suture removal
- location, type, and number of skin sutures removed
- number of skin sutures remaining (if appropriate)

- date for assessment for possible removal of the remaining skin sutures
- complications
  - name of practitioner notified
  - date and time of practitioner notification
  - prescribed interventions
  - response to those interventions
- application of dressing or adhesive strips
- tolerance of the procedure
- pain assessment findings
  - interventions performed
  - response to those interventions
- teaching provided to the patient and family (if applicable)
  - understanding of that teaching
  - follow-up teaching needed.

This procedure has been reviewed by the Academy of Medical-Surgical Nurses.

AMSN Academy of Medical-Surgical Nurses

Related Procedures

- Skin suture removal, ambulatory care
- Skin suture removal, pediatric
- Skin suture removal, pediatric, ambulatory care

Related UpToDate Patient Teaching Handouts

- Removing stitches
- Stitches and staples
- Taking care of cuts, scrapes, and puncture wounds
- Wound care – ED discharge instructions

References

(Rating System for the Hierarchy of Evidence for Intervention/Treatment Questions)

1. Forsch, R. T., et al. (2017). Laceration repair: A practical approach. *American Family Physician, 95*(10), 628–636. Retrieved February 2026 from https://www.aafp.org/afp/2017/0515/p628.html (Level VII)
   Abstract | Complete Reference | Full Text
2. World Health Organization. (2009). *Glove use information leaflet*. Retrieved February 2026 from https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/infection-prevention-and-control/hand-hygiene/tools/glove-use-information-leaflet.pdf?sfvrsn=13670aa_10 (Level VII)
3. Hollander, J. E. (2025). Assessment and management of scalp lacerations. In: *UpToDate,* Stack, A. M., & Wolfson, A. B. (Eds.).
   UpToDate Full Text
4. American Association of Critical-Care Nurses (AACN). (2024). *AACN procedure manual for progressive and critical care* (K. L. Johnson, Ed.; 8th ed.). Elsevier.
5. Centers for Disease Control and Prevention. (2002). Guideline for hand hygiene in health-care settings: Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. *MMWR*

Recommendations and Reports, 51(RR-16), 1–45. Retrieved February 2026 from https://www.cdc.gov/mmwr/pdf/rr/rr5116.pdf (Level VII)
6. World Health Organization (WHO). (2009). *WHO guidelines on hand hygiene in health care: First global patient safety challenge, clean care is safer care*. Retrieved February 2026 from https://iris.who.int/bitstream/handle/10665/44102/9789241597906_eng.pdf (Level VII)
7. Joint Commission. (2026). Standard NPG.05.03.01. *Comprehensive accreditation manual for hospitals.* (Level VII)
8. Accreditation Commission for Health Care. (2025). Standard 07.02.05. *Accreditation requirements for acute care hospitals.* (Level VII)
9. Centers for Medicare and Medicaid Services. (2024). Condition of participation: Infection prevention and control and antibiotic stewardship programs. 42 C.F.R. § 482.42.
10. DNV Healthcare USA, Inc. (2025). IC.1.SR.3f. *NIAHO® accreditation requirements, interpretive guidelines and surveyor guidance – revision 25-1.* (Level VII)
11. Joint Commission. (2026). Standard NPG.01.01.01. *Comprehensive accreditation manual for hospitals.* (Level VII)
12. Accreditation Commission for Health Care. (2025). Standard 15.01.07. *Accreditation requirements for acute care hospitals.* (Level VII)
13. Joint Commission. (2026). Standard RI.11.01.01. *Comprehensive accreditation manual for hospitals.* (Level VII)
14. Centers for Medicare and Medicaid Services. (2024). Condition of participation: Patient's rights. 42 C.F.R. § 482.13(c)(1).
15. DNV Healthcare USA, Inc. (2025). PR.2.SR.5. *NIAHO® accreditation requirements, interpretive guidelines and surveyor guidance – revision 25-1.* (Level VII)
16. Joint Commission. (2026). Standard PC.12.02.01. *Comprehensive accreditation manual for hospitals.* (Level VII)
17. Joint Commission. (2026). Standard NPG.06.02.01. *Comprehensive accreditation manual for hospitals.* (Level VII)
18. Waters, T. R., et al. (2009). *Safe patient handling training for schools of nursing*. Retrieved February 2026 from https://www.cdc.gov/niosh/docs/2009-127/pdfs/2009-127.pdf (Level VII)
19. Siegel, J. D., et al. (2007, revised 2024). *2007 guideline for isolation precautions: Preventing transmission of infectious agents in healthcare settings*. Retrieved February 2026 from https://www.cdc.gov/infection-control/media/pdfs/Guideline-Isolation-H.pdf (Level VII)
20. Accreditation Commission for Health Care. (2025). Standard 07.02.04. *Accreditation requirements for acute care hospitals.* (Level VII)
21. Occupational Safety and Health Administration. (2019). *Bloodborne pathogens, standard number 1910.1030*. Retrieved February 2026 from https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030 (Level VII)
22. 3M Health Care (2011). *Steri-Strip™*. Retrieved February 2026 from https://multimedia.3m.com/mws/media/498990O/steri-strip-wound-closure-latex-package-insert-english.pdf
23. Ganz, D. A., et al. (2013). *Preventing falls in hospitals: A toolkit for improving quality of care* (AHRQ Publication No. 13-0015-EF). Agency for Healthcare Research and Quality. Retrieved February 2026 from https://www.ahrq.gov/sites/default/files/publications/files/fallpxtoolkit.pdf (Level VII)
24. Rutala, W. A., et al. (2008, revised 2024). *Guideline for disinfection and sterilization in healthcare facilities, 2008*. Retrieved February 2026 from https://www.cdc.gov/infection-control/media/pdfs/Guideline-Disinfection-H.pdf
25. Accreditation Commission for Health Care. (2025). Standard 07.04.01. *Accreditation requirements for acute care hospitals.* (Level VII)

26. Joint Commission. (2026). Standard RC.12.01.01. *Comprehensive accreditation manual for hospitals.* (Level VII)
27. Centers for Medicare and Medicaid Services. (2024). Condition of participation: Medical record services. 42 C.F.R. § 482.24(b).
28. Accreditation Commission for Health Care. (2025). Standard 10.00.03. *Accreditation requirements for acute care hospitals.* (Level VII)
29. DNV Healthcare USA, Inc. (2025). MR.2.SR.1. *NIAHO® accreditation requirements, interpretive guidelines and surveyor guidance – revision 25-1.* (Level VII)
30. American Academy of Dermatology Association. (2025) *Minimize a scar: Proper wound care tips from dermatologists*. Retrieved February 2026 from https://www.aad.org/public/skin-hair-nails/injured-skin/wound-care

Additional References

- deLemos, D. M., & Singer, A. J. (2025). Skin laceration repair with sutures. In: *UpToDate,* Stack, A. M., & Wolfson, A. B. (Eds.).
  UpToDate Full Text
- Ford, C., & Hill, B. (2024). A guide to removing sutures. *British Journal of Nursing, 33*(20), S42–S49. Retrieved February 2026 from https://doi.org/10.12968/bjon.2023.0211
- Liddle, C. (2024). How to remove non-absorbable sutures. *Nursing Standard, 39*(12), 64–73. Retrieved February 2026 from https://doi.org/10.7748/ns.2024.e12385

Rating System for the Hierarchy of Evidence for Intervention/Treatment Questions

The following leveling system is adapted from *Evidence-Based practice in nursing & healthcare: A guide to best practice,* Fifth edition, by Bernadette Mazurek Melnyk and Ellen Fineout-Overholt (2023).

Level I	Evidence from a systematic review or meta-analysis of all relevant randomized controlled trials (RCTs)
Level II	Evidence from well-designed single RCTs (experimental)
Level III	Evidence from well-designed nonrandomized controlled trials (quasi-experimental), systematic reviews of a complete body of evidence, and intervention studies using mixed methods
Level IV	Evidence from well-designed case-control and cohort studies (observational)
Level V	Evidence from systematic reviews of qualitative and descriptive studies
Level VI	Evidence from single descriptive and qualitative studies, evidence-based practice implementation, and quality improvement projects
Level VII	Evidence from expert opinion, expert committee reports, and literature reviews

Data from Gyatt, G., & Rennie D. (2002). Users' guides to the medical literature. American Medical Association; Harris, R. P., et al. (2001). Current methods of the U.S. Preventative Services Task Force: A review of the process. American Journal of Preventative Medicine, 20, 21-35.