



SECTION 9: WOUND CARE

9.5 Surgical Wound

9.5.2 Removal of Sutures and Staples

Aims

1. To promote healing and minimise scarring.
2. To remove sutures and staples so as to minimise trauma, pain and infection risk.

Background

All wound closures are “foreign bodies” and if left in place too long they may cause excess scarring and/or may become a focus for infection. Sutures should therefore be removed as soon as the wound is strong enough to support itself. Uncomplicated surgical wounds typically heal between 5 to 10 days after surgery.¹⁻³

Although there are different suturing methods (eg. subcuticular, interrupted, continuous etc.) and different metal clips used (eg. michel, staples) the principles for removal remain the same.

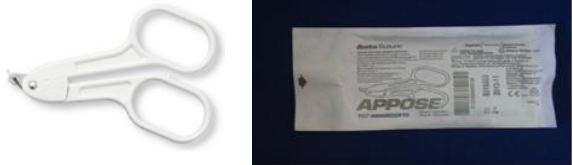
Key Points

- Use aseptic non touch technique for all wound care and for removing sutures, staples or clips.²
- Always check specific post operative instruction prior to removal of dressings and sutures/staples.
- Careful assessment of the wound is required before removal of sutures/staples. Wound healing typically occurs between days 5-10 after wound closure,² however intrinsic and extrinsic factors can affect/delay the healing process.
- Consider pain relieving strategies (non-pharmacological and pharmacological) prior to wound care and removal of sutures or staples.

Removal of plain interrupted sutures and staples:**Equipment**

- Dressing trolley/large tray
- Dressing pack and sterile cleansing solution (0.9% saline)
- PPE: non-sterile gloves, apron
- Sterile forceps
- ± stitch cutter or sterile scissors
- ± staple remover
- ± sterile adhesive sutures (steristrips)
- Waste bag

Steps	Additional Information
1. Prior to removal <ul style="list-style-type: none"> • Check type and number of sutures/staples to be removed.¹ 	
2. Prepare equipment following steps of aseptic non touch technique.	
3. Open dressing pack and prepare equipment on the aseptic field. <ul style="list-style-type: none"> • Remove dressing (if in situ) and dispose into waste bag; • Repeat hand wash and put on new gloves. 	
4. Cleanse the wound if required: <ul style="list-style-type: none"> • Working from the inside to the outside of the area and dealing with the cleaner parts first, swab the wound with normal saline until it is clean. • Use each swab once only. • Dry the skin gently with gauze. 	
5. Remove the sutures/staples: <ul style="list-style-type: none"> • Remove alternate sutures/staples first • Observe for rupture, splitting or opening (dehiscence) of the wound. • If the wound is intact, remove the remaining sutures/staples.⁴ 	

Steps	Additional Information
<ul style="list-style-type: none"> If wound dehiscing, leave remaining sutures/staples intact and contact surgical team.^{3, 5} Apply steristrips and /or dressing until reviewed. 	
<p>To remove sutures:</p> <ul style="list-style-type: none"> Raise the knot of suture with forceps and cut the suture close to the skin using scissors or stitch cutter. Inspect to ensure complete suture has been removed. 	<p>Prevents any skin organisms from being pulled through the wound.^{1, 2, 4}</p> <p>Suture material that is beneath the wound is considered to be bacteria free.^{2, 4, 6}</p>
<p>To remove staples:</p> <ul style="list-style-type: none"> Slide the lower jaw of the staple remover under the staple and squeeze the handles. Once the staple is bent in the middle and the edges free of the skin, lift and remove.² 	 <p>*Follow manufacturer's instructions on staple remover package.</p>
<p>6. Post Removal</p> <ul style="list-style-type: none"> Apply steristrips if required. Re-clean and/or dress the wound as required. 	<p>Provides continued supplemental wound support.⁴</p>
<p>7. Document removal of sutures/staples and wound healing status in patient's medical record.</p>	

Related policies, procedures and guidelines.

[PNPM 9.1.1](#) Wound Assessment and Dressing Selection


[PNPM 9.3.1](#) Simple Dressing.

References:

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File Path:	Removal of Sutures and Staples https://healthpoint.hdwa.health.wa.gov.au/policies/Policies/CAHS/PNPM%2009.05.02%20Removal%20of%20Plain%20Interrupted%20Sutures%20or%20Staples.pdf		
Document Owner:	CNM Stomal and Wound Therapy		
Reviewer / Team:	Wound Management Committee		
Date First Issued:	March 1995	Version:	3
Last Reviewed:	2 April 2014	Review Date:	2 April 2017
Approved by:	Wound Management Committee	Date:	13 March 2014
Endorsed by:	Paediatric Nursing Practice Committee	Date:	7 April 2014
Document Sponsor:	Nurse Director SSCCU		
Standards Applicable:	NSQHS Standards: 		

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