SESLHD PROCEDURE COVER SHEET

Health
South Eastern Sydney
Local Health District

NAME OF DOCUMENT	Wound - Management of Hypergranulation Tissue
TYPE OF DOCUMENT	Procedure
DOCUMENT NUMBER	SESLHDPR/400
DATE OF PUBLICATION	August 2021
RISK RATING	Low
EVIDENCE	National Safety and Quality Health Service Standard: Standard 1- Clinical Governance Standard 5 - Comprehensive Care Standard 6 - Communicating for Safety
REVIEW DATE	August 2026
FORMER REFERENCE(S)	SESLHDPR/400 Wound - Management of Hypergranulation Tissue
EXECUTIVE SPONSOR or EXECUTIVE CLINICAL SPONSOR	SESLHD Clinical Stream Director: Surgery, Perioperative and Anaesthetics
AUTHOR	SESLHD and ISLHD Wound Management Committee
POSITION RESPONSIBLE FOR THE DOCUMENT	Clinical Stream Nurse Manager Surgery, Perioperative & Anaesthetics
KEY TERMS	Hypergranulation, stoma, granulomas, wound, gastrostomy
SUMMARY	To assist clinicians to practice safely within scope of practice to manage hypergranulation tissue and promote wound healing.

1. PROCEDURE STATEMENT

This procedure ensures best management of hypergranulation tissue.

A thorough wound assessment is vital to:

- Identify the cause
- Exclude incorrect diagnosis e.g. scar tissue (hypertrophic scar) or malignancy.

Effective management of hypergranulation on suitable patients will improve their wound outcomes. Clinical judgement is needed before implementing hypergranulation management.

This Procedure should be used in conjunction with the SESLHD Wound care policies and procedures.

2. BACKGROUND

Hypergranulation tissue is one of the most common complications of wound healing[1,2,3]. Hypergranulation granulation tissue appears red, moist and shiny and protruding above the surrounding skin.

Hypergranulation can occur in most wound types and has the potential to inhibit wound closure[4].

Possible risk factors include[4]:

- Wounds that heal by secondary intention
- Excessive moisture at the wound bed
- Infection
- Persistent friction to the wound/wound edge e.g. ill-fitting gastrostomy, Supra-Pubic Catheter (SPC) tubes
- Prolonged occlusive dressing use
- Around stomas such as a colostomy, hypergranulation can occur. Faecal irritation is the most common factor if the bag aperture is cut too large.

Taking a comprehensive patient and wound history, carrying out a thorough clinical examination, and requesting further investigations will assist with understanding the cause of hypergranulation[4].

Aim of management will be correlated to the cause:

- Reduce microbial load
- Reduce excess exudate
- Reduce inflammation
- Debridement of excess tissue
- Reduce preventable friction

DEFINITIONS:

Hypergranulation tissue:	The formation of granulation tissue without migration of epithelial cells across the wound bed. That granular tissue is higher than the surrounding tissue, friable and irregular [5]. Also known as 'overgranulation tissue' or 'proud flesh'

3. RESPONSIBILITIES

3.1 Employees will:

- Ensure that they work within their scope of practice
- Attend relevant education related to this procedure

3.2 Line Managers will:

Ensure all clinical staff:

- are given the opportunity to attend district wound management education
- Work within the recommendations of this procedure
- Have the resources to implement this procedure

3.3 Medical staff will:

- Ensure that they work within their scope of practice
- Attend relevant education related to this procedure

4. PROCEDURE

4.1 Assess the wound

A thorough wound assessment is essential to:

- Identify the cause of hypergranulation tissue
- Exclude incorrect diagnosis e.g. scar tissue (hypertrophic scar) or malignancy.
- Refer to Appendix A for management flowchart.

4.2 Confirm tissue type

Confirm that tissue is hypergranulation
The patient should be referred for biopsy if malignant tissue is suspected. Signs of malignancy include:

- The presence of hypergranulation over many months
- A 'cauliflower-like' appearance
- The area being hard to touch
- The tissue grows beyond the wound margins
- When there is no response to treatment for hypergranulation[6]

4.3 Reduce hypergranulation tissue[7]

4.3.1 Apply a thick folded gauze pad over the wound dressing. This will increase pressure over the wound bed to flatten hypergranulation tissue.

Note: **never** apply/make a tourniquet when doing this

4.3.2 Change from an occlusive to non-occlusive dressing

4.3.3 Apply a foam dressing (if not already in use) to absorb wound exudate. This will help to flatten hypergranulation tissue

4.4 Absorption of wound exudate[7]

Use a wound product comparable to the amount of exudate

- Foam dressings**
- Hydrofibre dressings**
- Calcium alginate dressings**

- Super absorbent secondary dressings** e.g. Biatain super™, Zetuvit™, Exudry™, Vacutex™
- Hypertonic saline dressings e.g. Mesalt™ and Sodium Chloride dressing
- Do not use hydrogel or hydrocolloid dressings as they
  - may increase the growth of hypergranulation tissue
  - may not absorb enough exudate in hypergranulating wounds.

4.5 Reduce the microbial load of the wound

Use of antimicrobial product[7] examples include:

- Medical honey**
- Silver containing dressings/products**

4.6 Reduce the inflammation[7]

Use anti-inflammatory product examples include:

- Medical honey**
- Silver containing dressings/products**
- Polyhexamethylene Biguanide (PHMB)
- Topical corticosteroid preparations (refer to point 4.6.1)

Inflammation can also happen when there is an irritant to the wound. The cause of the irritant needs to be removed (when possible). If the irritant cannot be removed then use an anti-inflammatory dressing product.

4.6.1 Before the use of topical corticosteroid[7], **Always** discuss with a medical officer and ensure a medical order/prescription/authority letter is available before administration.
Apply as directed by medical officer.

- For inpatients e.g. eMEDs
- For Ambulatory Primary Health Care, medical authority letter should include:
  - name of cream/ointment to be used
  - length of time to be used
  - topical application to hypergranulation tissue
  - frequency of use e.g. daily
- Avoid contact with healthy tissue

4.7 Remove or treat cause of the friction[7]

Friction occurs when a product or device rubs, slips or drags continuously across the surface of the wound bed / wound edge.

- Review the wound for any causes of irritation. For example, a Percutaneous Endoscopic Gastrostomy (PEG) tube at the exit site on the skin. This happens if the PEG tube is too small or the flange is loose allowing the tube to rub the exit site[7]. The exit site wound should be reviewed and the problem rectified.
- For wounds on feet, review footwear, orthotics and/or any off-loading devices for any cause of irritation. Referral to podiatry or orthotists can assist with assessment and mitigating strategies.

** **Note:** Any dressing product should be used with a full understanding of the product, its use and any contra-indications.

4.8 Remove the hypergranulation tissue[7]

- Debride tissue e.g. Conservative Sharp Wound Debridement (qualified staff only to use this method). Refer to the SESLHDPR/348 Wound Debridement procedure
- Silver nitrate preparations (refer to 4.8.1)

4.8.1 How to use silver nitrate.

- **Not** recommended for first line therapy[2]
- Caution must be taken for patients with a history of **Peripheral Artery Disease (PAD)**: Before the use of Silver Nitrate on patients with PAD, Always discuss with a medical officer and ensure a medical order/prescription/authority letter is available before administration.
- **Precaution** do not use on area of tissues greater than **one** centimetre

Application (The following steps are completed daily for five days):

- Apply a thin layer of white paraffin or petroleum jelly (Vaseline™) to the healthy skin around the granulation tissue. Silver nitrate will injure the healthy skin
- Moisten the tip of the silver nitrate stick with sterile water
- Touch the silver nitrate stick onto the hypergranulation tissue for 5 seconds[6]. It will turn grey, and then black
- Apply sterile water to black area to cool the tissue
- Redress with patients usual dressing product
- Educate patient if pain remains after the dressing ends to cool wound area with water and to seek medical advice
- If there is no improvement in five to seven days consult wound care expert

Note: Areas using silver nitrate must have the Material Safety Data Sheet (MSDS) available and follow the disposal advice

5. DOCUMENTATION

- Wound Assessment & Management Plan Form (hard copy form number S0056) or the electronic equivalent for community use: Wound Assessment Treatment Evaluation Plan (WATEP).
- Any additional comments are to be recorded in the patient's health care record, including:
  - valid consent given
  - discussion re treatment options
  - discussion re patient goals (short and long term)
  - aspects of the education given on
    - prevention of hypergranulation
    - managing wound dressings
- Transfer documentation e.g. from community to hospital or vice versa
- Discharge letters should include wound assessment and management plan form. If applicable, the level of compression to be applied, the date and results of arterial test
- Inpatients - eMEDS
- Community patients - medical authority letter

6. AUDIT

Not required

7. REFERENCES

7.1 External References

1	Johnson, S. (2009) Overcoming the problem of over granulation in wound care. Wound Care S6-S12
2	Stephen-Haynes, J. & Hampton, S. Achieving effective outcomes in patients with overgranulation, Wound Care Alliance UK. http://www.wcauk.org/downloads/booklet_overgranulation.pdf accessed 21.2.15
3	Stephen-Haynes, J. (2013) Managing Overgranulation. www.woundcare.today.com accessed 12.5.15
4	Brown A, (2019) An overview of managing hypergranulation in wounds, JCN 2019, Vol 33, No 3. https://www.jcn.co.uk/files/downloads/articles/9-hypergranulation.pdf, [accessed August 2020]
5	*Best Practice Statement: Optimising wound care*. Wounds UK, Aberdeen. Available online at: www.wounds-uk.com/article.php?contentid=141&articleid=8950&page=1
6	Dukes et al (2013) Guidelines for standardising the treatment of stoma granulomas at the mucocutaneous junction. WCET Journal. Vol 33, No. 1, pp 12-15
7	Ramstadius B, Blanchfield D, (2009) Common treatments for hypergranulation, Epicare Newsletter 6-7
8	Best C (2004) The correct positioning and role of an external fixation device on a PEG. Nursing Times 100(18):50–1

7.2 Internal References

- SESLHDPD/146 Wound - Antiseptic dressing policy
- SESLHDPD/136 Wound - Negative Pressure Wound Therapy policy
- SESLHDPR/297 Wound - Assessment and Management procedure
- SESLHDPR/285 Wound - Digital wound photography procedure
- SESLHDPR/437 Wound - Managing pain at dressing change
- CEC Infection Prevention and Control Practice Handbook

8. REVISION AND APPROVAL HISTORY

Date	Revision No.	Author and Approval
May 2015	1	SESLHD and ISLHD wound committee
July 2015	1	Endorsed by SESLHD Wound Committee. Changes made as suggested by the Drug and Quality Use of Medicines Committee
November 2015	1	Endorsed by SESLHD Clinical and Quality Council
July 2021	2	Minor review: Formatting changes and link updated. Endorsed by SESLHD wound committee and Executive Sponsor.

Appendix A Management of Hypergranulation Flow Chart[6,7]