LRI Children's Hospital

Guidance for the prevention and management of overgranulation at gastrostomy and jejunostomy stomas

Staff relevant to:	UHL Children's Hospital nursing and medical staff caring for infants and children with gastrostomy and jejunostomy devices
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Written by:	S Caldwell
Trust Ref:	C64/2022

1. Introduction and Who Guideline applies to

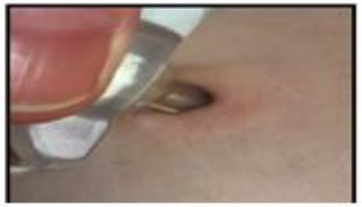
This Guidance is applicable to all levels of nursing and medical staff caring for infants and children with gastrostomy and jejunostomy devices. The purpose of this document is to guide staff in the prevention and management of overgranulation tissue around gastrostomy and jejunostomy devices.

Overgranulation Definition - A nodule of excess granulation tissue at the gastrostomy or jejunostomy insertion site which occurs due to inflammatory and immune responses and can be further complicated by friction and moisture. (Remington and Simons 2013, Borkowski 2005)

2. Identification and management of granulation

The following two tables provide information on the grading (normal, mild, moderate and severe), investigations, treatment and ongoing management of stoma site overgranulation.

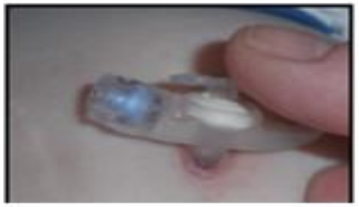
Treatment of granulation around peg sites



NORMAL

Standard treatment

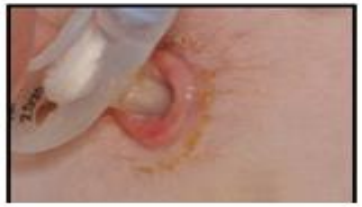
- observe stoma site
- clean the area with plain water daily using non-woven swabs, dry area well
- ensure the external fixator, or base of gastrostomy button device, is positioned correctly – not tight or loose and is approximately 2mm away from skin



MILD

Small area of over granulation visible, less than 0.5 x0.5cms + moderate exudate

- Ensure the external fixator, or base of gastrostomy button device, is positioned correctly
- To clean, apply saline and gauze to clean the area and to dry surrounding skin well.
- Apply a non-adherent contact layer or gel. Manuka honey dressings or Manuka honey gel. This can be secured with a silicone adhesive foam dressing.
- Repeat dressing change 1-2 times daily for 2 weeks, then review.
- If no improvement noted after 2 weeks then consider using dressings containing an antimicrobial, e.g. silver sulphadiazine, iodine or Secure with silicone adhesive foam dressing

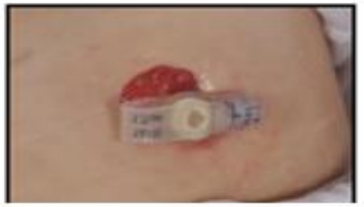


MODERATE

Over granulation more than 0.5 x 0.5cms

- Ensure the external fixator, or base of gastrostomy button device, is positioned correctly
- Apply surfactant soaks or gel for 10 minutes prior to application of ointment/cream, dry surrounding skin well.
- If exudate clear, then apply thin layer of hydrocortisone ointment 1% and secure with silicone adhesive foam dressing.
- Wound care regime for both ointments should be;

1st week –twice daily
2nd week – daily. Stop if cleared or if OG persists continue for 3rd week.
3rd week – alternate days, then stop treatment
Review area weekly to ensure over granulation tissue is reducing. Refer to relevant nurse specialist if no improvement noted after three weeks of treatment.

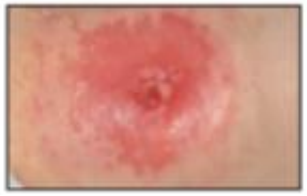


SEVERE

Large area of over granulation tissue that is not responding to moderate treatment regimen

- Obtain a swab for culture and sensitivity only if signs of infection (redness, tracking, exudate and/or pus discharge)
- Adhere to moderate treatment regime
- Refer to relevant Nurse Specialist

Treatment of skin infections

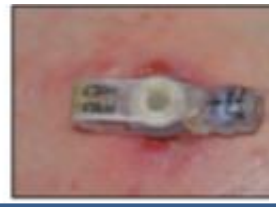


YEAST/FUNGAL INFECTION

Bright pink/red rash, sometimes shiny in appearance extending to surrounding skin
Child may complain of itching at site or scratching noted

- Apply surfactant soaks for 10 minutes prior to application of ointment/cream
- Apply thin layer of topical antifungal cream treatment to affected area 2/3 times daily for 1 week
- **NB**: If antifungal cream/ointment has steroid present, then change after 1 week to antifungal cream/ointment without steroid
- Change Gastrostomy device if button in situ
- Continue with treatment for another week
- Change Gastrostomy button device again
- Continue with treatment for a further week then stop

If PEG in situ, apply treatment until visible signs or wound improvement is noted



STAPHYLOCOCCUS AUREUS (MSSA/MRSA)

Heavy staphylococcus aureus present or history of recurrent staphylococcus aureus infections

- Treat as mild treatment for first week (antimicrobial dressing can be replaced with fusidic acid & hydrocortisone acetate)
- Change gastrostomy device if button in situ
- Treat as mild treatment in second week

Mild erythema, no tracking/pus

Topical treatment

No improvement or gets worse with topical then consider oral antibiotics

Moderate to severe erythema, tracking +/- pus

Wound swab for culture & sensitivity– start Oral antibiotics + topical treatment (as indicated by previous swab result) *

Chase swab results and adjust treatment accordingly.
If no improvement or patient becomes systemically unwell: seek medical advice (i.e. to rule out sepsis) and for further management
See - **Sepsis UHL Childrens Hospital Guideline**

Antifungal cream
used to treat fungal infections, i.e. Clotrimazole, Daktacort Miconazole.

NB - Daktacort is a combination product of both Miconazole and Hydrocortisone

Dexamethasone, Neomycin, Polymyxin b
i.e, Maxitrol eye ointment, containing antibiotic and steroidal properties

Fusidic acid and hydrocortisone acetate
i.e., Fucidin H cream

Iodine an antiseptic that kills bacteria and pathogens for example, Inadine, Povitulle

Silicone adhesive foam dressing
i.e., Allevyn Gentle Border, Kiliderm, Mepliex Border Lite

Silver sulphadiazine
(SSD) is a sulphonamide that kills bacteria by working on the cell membrane and cell wall i.e., Urgotul SSD

Oral Antibiotics
Please see BNF for prescribing guidance and dose.
https://bnfc.nice.org.uk/

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2.1 Special Considerations

- ***Do not apply iodine dressing to children under 6 months old, or if they have renal problems.
- Obtain swab for culture & sensitivity if infection suspected. Treat infection as indicated by microbiology results.
- If there are no previous microbiology result and oral antibiotics are required, start oral flucloxacillin (if intolerant to oral flucloxacillin-oral cefalexin; penicillin allergy- oral clarithromycin) after taking swab for culture & sensitivity.
- Oral antibiotics:
    - First line- oral flucloxacillin (oral solution can be unpalatable, use capsules if able to swallow)
    - If intolerant to oral flucloxacillin – oral cefalexin
    - Penicillin allergy – oral clarithromycin
- Contact microbiology for treatment options if evidence of infection and patient is known to have MRSA in the past or currently growing MRSA from the swab culture.
- Consider MRSA decolonisation for patients who isolate MRSA on swabs.
- Coliforms from stoma site swabs usually represent colonisation and would not require treatment.
- PEG device may require to be surgically removed if recurrent problems with gastrostomy site. Liaise with Gastrostomy Nurse and patient's surgical consultant.
- If using creams or ointments containing steroids, apply a thin layer and wash hands immediately post

3. Education and Training

None

4. Monitoring Compliance

None identified

5. Supporting References

C Gardiner, A Rodgers, L Paterson & M Kinney, Network Manager with support from WoSPGHaN Enteral Nutrition sub-group Published: January 2019 (Version 1)

Remington and Simons 2013, The percutaneous endoscopic gastrostomy tube: a nurse's guide to PEG tubes Medsurg Nurs. Mar-Apr 2013;22(2):77-83.

S. Borkowski 2005. G tube care: managing hypergranulation tissue. Nursing. 2005 Aug;35(8):24.

6. Key Words

PEG, Tissue

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

CONTACT AND REVIEW DETAILS	
Guideline Lead (Name and Title) S Caldwell – Nurse Specialist	**Executive Lead** Chief Nurse
Details of Changes made during review: New document V2 January 2023 Typo in severe treatment on page 2 - corrected. - Did say Adhere to mild treatment regime now states moderate Removed fluconazole cream as not an available Removed Nystatin oral liquid as treatment consideration Clarified that Daktacort is a combination product of miconazole and hydrocortisone. Added MRSA decolonisation for patients who isolate MRSA on swabs. Removed Nystaform HC as its non-formulary	