Introduction
Stoma infection is a common complication of enteral feeding tube (G tube, GJ or combination G/GJ and J tube) placement. Wound infections occur on a continuum, from mild to severe, with accurate assessment, diagnosis and treatment leading to optimal outcomes. The impacts of misdiagnosis of stoma infection include:

- Unnecessary antibiotic use which increases risk of medication adverse effects and development of antibiotic resistant organisms.
- Unnecessary health care use (e.g., clinic and emergency department visits) and admissions to hospital.
- Patient pain, trauma, and risk of exposure to nosocomial infection during hospital visits.
- Unnecessary cost to families for visit, including transportation, medications, dressings, and missed work.
- Over testing (swabs).

This Clinical Practice Guideline (CPG) supports the practice of health care providers while managing stoma issues in patients with a G, GJ, combination G/GJ and/or J tube. The purpose of this CPG is to:

- Provide a standardized approach to the assessment and management of common stoma issues, including comparisons between different skin issues such as infection, hypergranulation tissue and contact dermatitis.
- Offer an interactive, visually focused tool that promotes streamlined care and ongoing clinical thinking related to appropriate wound swabbing, the use of antibiotic therapies and documentation and follow-up practices.
- Optimize the patient experience by being able to quickly identify stoma issues.

Definitions (additional relevant definitions may be found here)
- **Stoma**: As it relates to enteral feeding tubes, a stoma is an incision or hole created by a General Surgeon, Interventional Radiologist or Gastroenterologist that leads to the stomach or jejunum.
- **Hypergranulation tissue**: Hypergranulation is an increase in the proliferation of granulation tissue such that the tissue progresses above or over the wound edge and inhibits epithelialization (the process of covering raw tissue with new skin). It presents as raised, soft/spongy, shiny, friable, red tissue.
- **Infection**: When the quantity of microorganisms in a wound become imbalanced such that the host response is overwhelmed, and wound healing becomes impaired. Transition from non-infected to infected is a gradual process determined by the quantity and virulence of microbial burden and the individual’s immune response. Transient redness an irritation may be commonplace and not always a sign of infection.
- **Failed first line of treatment**: Stoma infection that persists despite completing first line treatment.
- **Recurrent infection**: Multiple new stoma infections within a short period of time. At SickKids, more than 3 new infections within 1 year is considered recurrent.

### Clinical Practice Recommendations

The Enterostomy Tube Stoma Assessment Pathway supports health care providers in recognizing the signs and symptoms of stoma issues and provides a tool for management.

[Click here for the Enterostomy Tube Stoma Assessment Pathway](#)

If you require assistance with stoma assessment for SickKids patients:

- **Providers outside of SickKids**
  
  Contact the G Tube Resource Nurse Monday – Friday 8:30 am – 4:00 pm by phone (416-813-7177) or email (g.tubenurse@sickkids.ca). After hours, email a photo and the G Tube Resource Nurse will follow-up within 1-2 business days.

- **Providers at SickKids**
  
  Contact the G Tube Resource Nurse Monday – Friday 8:30 am – 4:00 pm by Vocera, phone (207177), or email (g.tubenurse@sickkids.ca). Please upload a photo of the stoma to Epic. After hours, email the G Tube Resource Nurse and they will follow-up within 1-2 business days.

*For non-SickKids patients, contact your local G Tube Specialist*

### Other Clinical Considerations

- **Antimicrobials**
- **Infection prevention**
- **Managing the wound biofilm – chronic wounds affecting enteral feeding tubes**
- **Wound cultures and treatment**

### Statement of Evidence

The authors performed an extensive literature review and benchmarked practice to other pediatric tertiary care centers. The recommendations found within this CPG and the Enteral Tube Stoma Assessment Pathway were adapted from guidelines established in the Wound Infection in Clinical Practice: Principles of Best Practice (International Wound Infection Institute, 2022) and the Best Practice Recommendations for the Prevention and Management of Wounds (Wounds Canada, 2017). Medication recommendations are based on the Anti-Infective Guidelines for Community-Acquired Infections (2019). There was no conflict of interest amongst the guideline group and reviewers.
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Simulation
Simulation was used as a quality improvement tool to test and validate the usability and functionality of the CPG.

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**Supporting Documents**
- Dressing Options
- Assessing exudate
- Levine Wound Swab Technique
- SickKids e-Formulary

**References**


Wound Care Education Institute: Exudate: The Type and Amount Is Telling You Something Published on January 29, 2016 by Keisha Smith, MA, CWCMS https://blog.wcei.net/exudate-the-type-and-amount-is-telling-you-something


Attachments:

Additional Definitions.pdf
Antimicrobials.pdf
Assessing Exudate.pdf
Biofilm.pdf
CPG FINAL (May 2023).pdf
Dressing Options.pdf
Infection Prevention.pdf
Levine wound swab.pdf
Wound Cultures.pdf