Centre universitaire de santé McGill
McGill University Health Centre

CLINICAL PROCEDURE – MUHC

(MÉTHODE DE SOINS – CUSM)

☐ Medication included ☒ No Medication included

THIS IS NOT A MEDICAL ORDER

Title:	Gastric decompression for neonatal and pediatric patients
This document is attached to:	MUHC hand hygiene policy Clinical protocol: Insertion, verification of position, care and removal of nasogastric (NG) and orogastric (OG) tubes in the neonatal and pediatric population

1. DEFINITION AND PURPOSE

The purpose of this protocol is to describe best practices in relation to the care and management of neonatal and pediatric patients requiring gastric decompression.

2. CARE GOALS

Provide safe and effective gastric decompression

3. PROFESSIONALS INVOLVED

Nurses, Candidates for the Profession of Nursing (CPNs) and Licensed Practical Nurses (LPNs) providing care for patients requiring gastric decompression. Nurses, CPNs and LPNs are expected to review this procedure.

4. PATIENT POPULATION

Neonatal and pediatric patients cared for at the Montreal Children's Hospital who require gastric decompression.

5. INDICATIONS

Gastric decompression may be indicated in the following situations

- Treatment of ileus or bowel obstruction
- Management of severe pancreatitis.
- Minimize risk of aspiration during invasive and non-invasive ventilation
- Management of upper gastrointestinal tract bleed
- Minimize discomfort and feeding intolerance associated with air swallowing during non-invasive ventilation

6. CONTRAINDICATIONS

Contraindications relate to the insertion of the NG and OG tube and not gastric decompression procedure itself.

Refer to the Clinical protocol for the insertion, verification of position, care and removal of NG and OG tubes in the neonatal and pediatric population

7. EQUIPMENT

Non-sterile gloves

Vented or non-vented gastric tube

- In general a vented gastric tube should be used for gastric decompression. For NICU patients, a non-vented gastric tube (feeding tube) can be used. In this instance gastric decompression can only be achieved using straight drainage.

	Polyvinylchloride (PVC) (non-vented)	Polyurethane (non-vented)	Vented gastric tube (Salem sump™ or Replogle™)
Sizes and lengths available	5 French 15 inches 5 French 36 inches 6 French 15 inches 8 French 15 inches 8 French 42 inches	5 French 16 inches 6.5 French 24 inches 8 French 24 inches 8 French 36 inches	6 French 8 French 10 French 12 French 14 French 16 French
Recommended frequency to change tube	Weekly	Monthly	Weekly

Note: Salem sump™ and Repogle™ tubes have two internal lumens: one for drainage and one for air (air vent). The air flow prevents the formation of a vacuum when the tube adheres to the stomach lining thus avoiding damage to the gastric mucosa.

Specimen trap or drainage bag or 10 mL syringe with the syringe barrel removed

Suction source with suction tubing, suction gauge and canister

Blue pad

2 X 2 non-sterile gauze

8. PROCEDURE

For insertion, verification of placement, care and removal of a gastric tube, refer to the Clinical protocol: Insertion, verification of position, care and removal of nasogastric (NG) and orogastric (OG) tubes in the neonatal and pediatric population.

- Verify medical order. Gastric decompression can require continuous suction or straight drainage. The order should specify which type of drainage is required.

For continuous suction using a vented gastric tube

- Explain procedure to patient and family
- Wash hands and don non-sterile gloves

- With a vented gastric tube in place connect the gastric tube to the suction tubing.
- A specimen trap can be used to accurately measure output and to procure samples. In this case, connect the flexible tube of the specimen trap to the gastric tube. Connect the suction tubing to the white plastic port of the specimen trap. To accurately measure small volumes of gastric output, aspirate the content of the specimen trap with a syringe.

- Remove gloves and wash hands.
- Adjust suction gauge to between 60-80 mmHg. Do not exceed 80 mmHg.

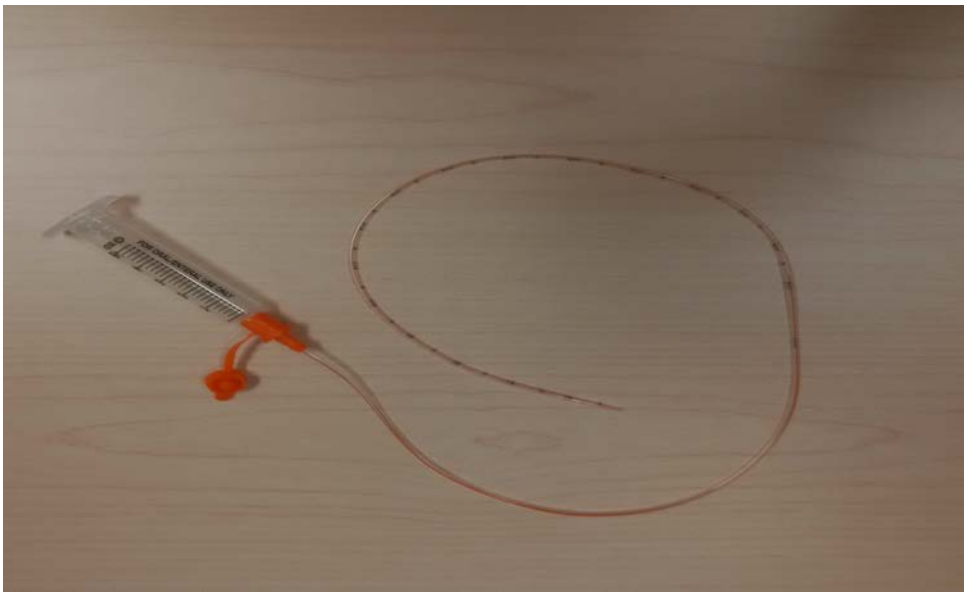
For straight drainage using a vented gastric tube:

- Explain procedure to patient and family.
- Wash hand and don non-sterile gloves.
- With a vented gastric tube in place, attach specimen trap or drainage bag to the gastric tube.

- Protect linens from leakage by placing the specimen trap or connection to a drainage bag on a blue pad.
- Remove gloves and wash hands.

For straight drainage using a non-vented gastric tube (feeding tube):

- Explain procedure to patient and family.
- Wash hands and don non-sterile gloves
- Remove the syringe barrel from a 10 mL syringe and discard.
- With a non-vented NG or OG tube in place, attach the syringe with the barrel removed to the gastric tube.



- Insert 2 X 2 non-sterile gauze into the syringe to capture any drainage.
- Protect linens with a blue pad.
- Remove gloves and wash hands.

Care of a gastric tube used for gastric decompression

- Monitor skin integrity at the insertion site every shift. Ensure the gastric tube is not creating a device related pressure injury.
- Vented gastric tubes and PVC tubes should be changed weekly. Polyurethane tubes should be changed monthly.

> If the tube was inserted by the surgical team in the context of a surgical procedure, do not remove or replace. Verify with surgical team for recommended care.

- **Advise the physician if any of the following is noted:**
    - **The presence of frank blood or "coffee ground" appearance of drainage**
    - **Large volume losses as this can lead to electrolyte imbalances and hypovolemia, both of which may require IV fluid replacement.**

Troubleshooting

Issue	Suggested Interventions
Sudden decrease in drainage	• Verify gastric drainage set-up. • Ensure tube is not kinked. • Verify suction if gastric tube is to continuous suction. • If drainage set-up is functional, attempt to flush gastric tube with water to verify patency. Do not continue to flush if resistance is encountered. The gastric tube may be blocked. Advise physician.
Fluid in air vent	• If fluid appears in the air vent, flush the air vent with air using a syringe. Never instill fluid into the air vent. • Never occlude or clamp the air vent. • Maintain the air vent above the level of the patient's chest. This prevents fluid from backing up into the air vent.

Documentation

- Document aspect and color of drainage, use of gravity or suction and skin integrity at insertion site in the nursing progress notes or nursing flowsheet.
- Document volume of drainage and irrigation on the intake and output record.

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11. APPROVAL PROCESS

Committees	Date [yyyy-mm-dd]
☒ Clinical Practice Review Committee (CPRC) (if applicable)	2018-06-28
☐ Adult Pharmacy and Therapeutics (P&T) (if applicable)	NA
☐ Pediatric Medication Administration Policy (PMAP) (if applicable)	NA
☐ Pediatric Pharmacy and Therapeutics (Peds P&T) (if applicable)	NA
☐ Multidisciplinary Council (MDC) (if applicable)	NA

12. REVIEW DATE

To be updated in maximum of 4 years or sooner if presence of new evidence or need for practice change.

13. REFERENCES

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Saskatoon Health Region (2017). Policies and procedures: Nasogastric/Orogastric tube: Insertion, Care and removal. Retrieved from https://www.saskatoonhealthregion.ca/about/NursingManual/1040.pdf on 05/03/2018

Version History (for Administrative use only)			
Version	**Description**	**Author/responsable**	**Date**
No 1	Development and Approval	Eren Alexander, Nursing Coordinator	2018-6-28
No	Description (Création, Adoption, Révision avec modification, Révision sans modifications, etc.)	Acronyme direction, Nom fonction	

TABLE 1 - TEACHING PROGRAM

The client and family (caregivers) know :
Purpose of gastric decompression
Need to monitor intake and output

The client knows :

The client and family or the caregiver received and understood the information :

TABLE 2 - Memory Aid

Required Equipment *(list the required material)* **:**

Procedure *(list the steps to perform the procedure)*

Executory Steps :
Monitoring :