



Children's Health Ireland
at Crumlin

Standard Operating Procedure on the Immediate Post Operative Nursing Care of the Child/Infant

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Approved By <i>Name: Fionnuala O' Neill</i> <i>Title: Nursing Practice Development Coordinator</i>	
Authorised By <i>Name: Karen Mc Guire</i> <i>Title: Director of Nursing</i>	
Author/s	<i>Name: Rosemary Clerkin</i> <i>Title: Clinical Placement Coordinator</i>
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1.0 Introduction

This document outlines the general post-operative nursing care of the child with rationales. This SOP can be used in conjunction with other specific nursing care documents.

2.0 Definition of Standard Operating Procedure

The term '**Standard Operating Procedure**' is a way of carrying out a particular course of action and includes operations, investigations, pharmaceutical treatment, examinations and any other treatment carried out

3.0 Applicable to

This document is applicable to the registered nurse caring for the child post operatively.

4.0 Objectives of Standard Operating Procedure

This SOP will guide the nurse when caring for the child postoperatively but must be used in conjunction with specific post-operative instructions advised by the surgeon and the specialty.

5.0 Definitions / Terms

O2 Sa – Oxygen Saturation

LPS – Low Pressure Suction

LOC - Loss of Consciousness

NGT – Nasal Gastric Tube

6.0 Procedures

It is important for registered nurses caring for children postoperatively is familiar with the steps of this SOP.

7.0 Implementation Plan

It is important that this document is highlighted to the registered nurse on induction to a surgical ward. It is also a useful resource to the student nurse gaining clinical experience in the surgical setting.

Procedure	Rationale
<p>Preparing the bed space prior to the child arrival post-surgical event</p> <ul style="list-style-type: none"> ▪ Prepare bed space ▪ Check the oxygen and suction is in working order with access to ambubag ▪ Electric post op bed where possible (air mattress ordered if required) ▪ Make post op bed with clean linen ▪ Bed in middle of room for clear safe access ▪ SPO2 monitor in room alongside BP monitor ▪ IV stand & pump(s) in room ▪ Chest drain clamps x 2 available with the child nursed on a chest drain at all times ▪ Low pressure suction set up if required ▪ Keep parents / guardians updated if child is having a long procedure in Theatre ▪ When child is ready for collection, contact parents to wait in theatre reception when you go to collect child in the recovery room. <p>Collecting the child from the Recovery Room</p> <ul style="list-style-type: none"> • Identify the patient • Ensure the patient's airway is patent, assess respiratory effort and O2Sa in Room Air • Check the vital signs within normal limits and the last set of observations are recorded on the patient's PEWS chart. 	<p>It is important to prepare a <u>safe</u> bed space for the child post-operatively as this is a high-risk time post-surgery and anaesthetic (Hockenberry & Wilson 2015)</p> <p>Fresh clean linen for comfort and reduce risk of infection.</p> <p>This ensures safe transfer from theatre trolley to ward bed.</p> <p>The availability of equipment must be in working order and be appropriate for the child being cared for (Ball et al., 2015).</p> <p>To reduce risk of lung collapse if chest drain should disconnect. (OLCHC 2015).</p> <p>Ensure low pressure suction is a written instruction by surgeon caring for the child (OLCHC 2015).</p> <p>This will help to reduce anxiety for the parents/guardians.</p> <p>This will facilitate a nursing handover in the recovery room.</p> <p>Ensure correct child is being transferred from theatre.</p> <p>It is important to ascertain the patient's airway status post operatively.</p> <p>Please be aware normal limits for the child's age as per APLS guidelines (2021) and PEWS Guideline CHI (2020) Consider medication given or infusing as it may influence vital signs.</p>

<ul style="list-style-type: none"> • Pain – check analgesics administered and prescribed. Assess pain levels. • Wound & drain check • If NGT is in situ, is it for free drainage or to be clamped and released later? • If repogyle in situ – is it on free drainage/ aspirates - Replacements to be given? • Chest drain, ensure LPS, how many cm of water is documented in surgical notes. Record drainage. • Check Urine output intraoperatively – if catheter in situ check it is draining, if dripping stent in situ visually check it is dripping continuously into nappy • Fluids Analgesia & Antibiotics prescribed • Ensure IV cannula flushed if not attached to an infusion. • Check opioid pump and prescription – read syringe level prior to discharge from recovery. • If patient is nursed on an epidural or wound block ensure motor and sensory observations are assessed and documented • It is important the child is as comfortable – they should be seen by anaesthetics prior to transfer if ongoing discomfort 	<p>It is important to be able to plan the child's pain management regime to maintain comfort. Be familiar with the Pain Ladder CHI (2021) Be familiar with the appropriate pain assessment tools for children of all age groups. Recognition and assessment of acute pain in children Assessment RCN (2009)</p> <p>Consider the surgery the child has had; this will influence the requirement for drains (Ball et al., 2015)</p> <p>It is imperative to be aware of the surgical instructions on the yellow sheet to be fully informed of what nursing care is required for the child post operatively.</p> <p>Check drainage level to ascertain drainage already and identify further losses.</p> <p>This is to ensure stent is patent</p> <p>To facilitate uninterrupted care to the patient and maintain comfort, administered as per medication policy CHI (2017)</p> <p>Unused cannula must be flushed in Recovery due to the risk of induction agents being in the line. If not performed there is a risk the child could have LOC on the ward when flushed.</p> <p>This is to ascertain the baseline level, correct prescription and promote safe care.</p> <p>This will ensure safe care for the child. Be familiar with the Guidelines for Management of Epidural Infusions OLCCHC (2008)</p> <p>It is important alleviate discomfort while anaesthetic team is close by.</p>
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Returning to the ward

- O2, Bed sides up, Drains, Pumps
- Talk to the child explaining to them they are going to meet their Parent(s)/ guardian
- Ensure a Porter is accompanying you and the child
- Meet parents in reception

This ensures safe and comfortable transfer of the child to the ward.

To alleviate anxiety (Hockenberry & Wilson 2015)

Ensuring safe transfer

On return to the ward

- Full set of PEWS and pain assessment
- Wound assessment to be carried out with observations along with pressure area care
- Continuous O2sats monitoring until stable – if on an opioid infusion or epidural they will require continuous O2sats monitoring
- IV fluids to be connected if required as prescribed (100% maintenance unless indicated otherwise)
- Administer IV medication / regular analgesia as prescribed
- Monitor urine output: infant 2mls/kg, child > 1ml/kg/hr, adolescent >0.5ml/kg/hr

This assessment is important to ascertain the child's condition after transfer to the ward (Ball et al.,2015)

Regular observations must be carried out to monitor the child's condition as per post-operative guidelines and surgeon's instructions.

Please refer to appropriate CHI Guidelines n morphine infusions and epidural infusions

Be cautious, assess the patient's hydration status throughout.

To maintain comfort and healing (Hockenberry & Wilson 2015)

Please refer to the SOP on Post-Operative vital signs.

Reduced urinary output is a symptom of dehydration, sepsis and renal failure. Urinary retention can occur due to analgesia or epidural blocks. Urinary output should be monitored on all post-operative patients.

Fluid Balance

Intravenous fluid intake for a child is prescribed according to the child's weight.

To calculate the fluid requirements for a child for 24 hours: The following formula is a guide

This SOP is still in draft

- First 10 kgs of body weight 100mls/kg
- Next 10 kgs of body weight 50mls/kg
- Every kg thereafter 20mls/kg

Fasting

- After consultation with the team, generally when the patient is alert and orientated post anaesthetic
- May start with clear fluids and progress as tolerated to light diet. **CHECK POST-OP NOTES.**
- Ensure correct fasting / diet sign on patient door and that patient and family are aware of same
- Depending on the surgery if the bowel was handled, the patient must remain fasting until bowel sounds are heard by the surgeon on review and this must be documented
- Blood Sugar monitoring as required
- Ensure oral hygiene is maintained.

Elimination

Urinary Output expected

- Infant 2ml/kg/hour
- Child: 1ml/kg/hour
- Child > 12years: 0.5mls/kg/hour

Document fluid balance every hour and check iv site

Wound and Skin Care

- Always check wound when performing observations
- Do not disturb dressing unless evidence of fresh blood/ discharge

Ensure accurate weight is recorded and adhere to the formula to guide fluid requirements.

<https://www.olchc.ie/Healthcare-Professionals/Nursing-Practice-Guidelines/Our-Lady-s-Ward-Surgical-Orientation-Booklet-2018.pdf>

Please read post-operative instructions to ensure safe patient care.

Peristalsis must return prior to introducing fluids to prevent the risk of paralytic ileus (Hockenberry & Wilson 2015)

To ensure blood sugars are maintained between **4 – 7 mmols**
To ensure comfort and freshness

This guide is important to consider when monitoring urinary output. As the infant has an immature renal system the expected urinary output is of higher volume. <https://www.olchc.ie/Healthcare-Professionals/Nursing-Practice-Guidelines/Our-Lady-s-Ward-Surgical-Orientation-Booklet-2018.pdf>

Check for discharge or active bleeding- report if active bleeding and where appropriate apply pressure.

Most wound closures have dissolvable sutures please take note of post-surgical instructions in post-operative note.

- Give wound care advice as appropriate to parents.
- Observe for redness, swelling, ooze, pain, dehiscing ->wound swab
- Check pressure areas
- Keep skin clean and dry

Pain Management

- Regular pain assessment using the age-appropriate pain assessment tool
- Regular Analgesia as prescribed
- Liaise with the pain specialist team
- Patient may be nursed on an Epidural, ensure epidural assessment is performed regularly as per epidural guidelines
- If the child is receiving an opioid – ensure an antiemetic is prescribed

Age-appropriate Pain Tools

- FLACC <5yrs
- Faces Pain Scale 5 – 13years old
- Verbal rating >13years old
- Numerical scale
- Visual Analogue Scale

Documentation of care

Holistic care is guided by the Activities of Living Care plan No.1

- Based on the Nottingham Model of Care adapted from Roper Logan and Tierney model of care
- Ensure all relevant care plans are included

Involve parent / patient/guardian in the care planning process

- Record PEWS scores and act appropriately
- Strict fluid balance – intake & output monitoring
- Commence appropriate care bundles – IVC, PICC, CVC, Urinary catheter
- Update nursing evaluation

As per CHI information for parent's leaflets Check post-operative notes and follow specific instructions <https://www.olchc.ie/Children-Family/Parent-Patient-Information-leaflets/Parent-Patient-Information-Leaflets.html>

Those signs later post op may indicate signs of infection

There is increased risk of pressure areas post-surgery Ball et al.,(2015)

To ascertain pain score safely and act appropriately to alleviate pain using non pharmacological and non-pharmacological methods.

Assessing the epidural level is important to ascertain the level and maintain safe care. The nurse must have epidural competencies passed prior to caring for a child with an epidural.

To reduce risk of emesis

As per CHI Guideline for the Management of Opioid infusions for Acute pain (2018)


Documentation of care is part of our professional duty. NMBI (2015)

Smith (1995)

PEWS Guideline CHI (2020)

Royal College of Physicians in Ireland / Health Service Executive (2014) *Prevention of intravascular Catheter-related Infection in Ireland*. Dublin: HSE Health Protection Surveillance Centre.

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8.0 Evaluation and Audit

In the event of a risk or clinical incident regarding post-operative care, safety to the child is paramount. Surgical and/ anaesthetic assistance may be sought, the situation must be communicated to nursing management and then it must be documented on a clinical incident form. This may warrant an education refresher and / a change may be warranted on this SOP.

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