Introduction

Target Population:

- This pathway is for use with children aged 10-18 years old with no underlying disease or comorbidity who have been consulted and admitted by the General and Thoracic Surgery Team for a pectus excavatum repair (NUSS or Ravitch procedure).
- Patients are to be removed from this pathway if there are significant postoperative complications (example bowel obstruction or prolonged TPN), or a change in diagnosis.

Target users:

- Surgeons, medical trainees (residents and fellows), Nurse Practitioners, and bedside nurses.
### Pectus Excavatum Care Pathway

#### Expected Date of Discharge:

<table>
<thead>
<tr>
<th>PRE-OPERATION</th>
<th>RECOVERY</th>
<th>DISCHARGE</th>
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#### GOALS

- Obtain history
- Complete physical exam
- Assess vital signs
- Complete pain assessment (refer to Pain Assessment Guidelines)

- Complete pain assessment every 4 hours
- Ensure child has adequate pain control (refer to Pain Management Guidelines)
- Monitor vital signs as per AEP
- Obtain accurate in & out
- Complete wound assessment
- Complete JP drainage assessment and strip tubing every hours

- Adequate pain control
- JP drain removed if output <20 ml/day

#### DIO & IV FLUIDS

- Ensure that patient is NPO
- Administer D5W/0.9 NaCl with 20mmol KCl/L at maintenance
- Bolus as indicated
- Refer to Fluid and Electrolyte Guidelines

- Administer D5W/0.9 NaCl with 20mmol KCl/L at maintenance
- Bolus as indicated
- Clear fluids to diet as tolerated
- TKD once adequate oral fluid intake
- Refer to Fluid and Electrolyte Guidelines

- Regular diet

#### MECHANICS

- PCA or Thoracic Epidural as per Acute Pain Services (APS) regimen as tolerated
- Non-opioid analgesia as indicated
- NSAIDs as needed for pain
- For NUS procedure only: use Metoclopramide (Reglan) twice daily to assess Aspirin regimen total daily intake, not to exceed 75 mg/kg/day

- Provide prescription for oral narcotics
- Encourage hydration
- For bowel management: Polyethylene Glycol 3350 (PEG 3350)

#### ACTIVITY & EDUCATION

- Activity as tolerated
- No activity restrictions
- Provide education on pre-operative care for child and caregiver
- Teach parents/caregiver about post-operative care of pectus excavatum repair; consider medical alert bracelet

- Physiotherapy: deep breathing and coughing, incentive spirometer, activity restriction teaching, and mobility as tolerated
- Review incision care; leave suture strips until they fall off or remove after 10 days
- Review activity: activities of daily living as tolerated, encourage ambulation, use of incentive spirometer and no activity restrictions for 2-4 months
- Review bathing: may shower or take 4-hour baths after surgery
- Review signs and symptoms of wound infection: fever, redness, drainage, and/or increasing pain around incision, and/or fluid accumulations under breasts

- Activity: activities of daily living as tolerated, encourage ambulation, use of incentive spirometer, and no activity restrictions for 2-4 months
- No contact sports for 2-4 months
- Review when to call surgeon's office: signs of wound infection, signs of sepsis (review signs and symptoms with caregiver), increasing chest pain or shortness of breath, and/or recurrence of pectus deformity.
- Book follow-up appointment for 8-12 weeks post-op including chest x-ray for NUS procedure; ensure PediavNUS card is provided

### Guideline Group and Reviewers

**Guideline Group Membership**

1. Monping Chiang RN (EC), MS, NP General Surgery
2. Dina Prajapati RN(EC), BScN, MN, NP-PHC General Surgery

**Internal Reviewers**

1. Jacob Langer MD Pediatric Surgeon
2. Annie Fecteau MD Pediatric Surgeon
3. Sabrina Boodhan, Clinical Pharmacist

**External Reviewer**

1. Sharifa Himidan MD Pediatric Surgeon, North York General Hospital
References


Attachments:

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