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.
### 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

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#### Pectus Excavatum Care Pathway

<table>
<thead>
<tr>
<th>Pectus Excavatum Care Pathway</th>
<th>Expected Date of Discharge</th>
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<tr>
<td><strong>PRE-OPERATION</strong></td>
<td><strong>RECOVERY</strong></td>
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| 1. Hydration maintained  
2. Adequate pain control  
3. Patient prepared for OR  
4. Child/family are advised of post-op. Steps to be used upon arrival. Refer to procedure document | 1. Ambulation  
2. Adequate pain control  
3. Mobilization  
4. Able to tolerate fluids (intravenous post-op)  
5. Infection intact, dry, and no drainage | 1. Ambulate  
2. Adequate pain control  
3. Ambulation  
4. Able to tolerate diet  
5. Infection dry & intact  
6. Child care teaching completed  
7. Family understands discharge teaching |
| **GOALS** | **PROCESS** | **DIET & IV FLUIDS** |
| Obtain history  
Complete physical exam  
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 BSI/ER  
Obtain accurate intake and output  
Complete wound assessment  
Complete JP drainage assessment and strip tubing every hours | Adequate pain control  
JP drain removed if output <20 ml/day |
| **POST-OPERATION** | **MEDICATION** | **ACTIVITY & EDUCATION** |
| Ensure that patient is NPO  
Administer D5W:0.9 NaCl with 20ml KCl at maintenance  
RxB as indicated  
Refer to Fluid and Electrolyte Guidelines | Administer D5W:0.9 NaCl with 20ml KCl at maintenance  
RxB as indicated  
Clear fluids to diet as tolerated  
TPD/O receive adequate oral fluid intake  
Refer to Fluid and Electrolyte Guidelines | Regular diet  
Provide prescription for oral narcotics  
Rx:Oxycodone as indicated  
H2 Blocker if on NSAIDs  
Per NUSG procedure only: use Methochestan (Rotaxan) to assess Acetaminophen total daily intake, not to exceed 75 mg/kg/day  
For bowel management: Polyethylene Glycol 3350 (PEG 3350) |  
| Activity: as tolerated  
Consent for surgery  
Provide education re: pre-operative process for child and caregiver  
Teach parent/caregiver about post-operative care of pectus excavatum repair; consider medical alert bracelet | Physiostatus: deep breathing and coughing, incentive spirometer, activity restrictions 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, and use of incentive spirometer, and no contact sports for 2-4 months  
Review bathing: may shower or bathe 48 hours after surgery  
Review signs and symptoms of wound infection: fever, chills, redness, drainage, and/or increasing pain around incision, and/or fluid accumulations under incision | Activity: activities of daily living as tolerated with restrictions, encourage ambulation, ensure incentive spirometry, and review restrictions i.e. no contact sports for 2-4 months (to be assessed by surgeon during clinic appointment)  
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 reoccurrence of pectus deformity  
For follow-up appointment: 6-8 weeks post-op including chest x-ray for NUSG procedure; and ensure Pediact/NUSG card is provided |

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References


Attachments:

pectus_final_2019.pdf