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>Pre-Operation</th>
<th>Recovery</th>
<th>Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hydration maintained</td>
<td>1. Albuterol</td>
<td>1. Adequate pain control</td>
</tr>
<tr>
<td>3. Patient prepared for OR</td>
<td>3. Mobility as tolerated</td>
<td>4. Able to tolerate diet</td>
</tr>
<tr>
<td>4. Child/parent are advised of post-op bath/Wipes to be used upon arrival. Refer to procedure document</td>
<td>4. Able to tolerate chest drains (immediately post-op)</td>
<td>5. Incision dry &amp; intact</td>
</tr>
<tr>
<td></td>
<td>5. Incision intact, dry, and no drainage</td>
<td>6. Chest care management teaching completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Family understands discharge teaching</td>
</tr>
</tbody>
</table>

### PHYSICAL STATUS

- **Goal**: Obtain history
- **Goal**: Complete physical exam
- **Goal**: Complete pain assessment (refer to Pain Assessment Guidelines)

### DVT & IV FLUIDS

- **Goal**: Ensure that patient is NPO
- **Goal**: Monitor vital signs as per NPO
- **Goal**: Monitor accurate intake and output
- **Goal**: Complete wound assessment
- **Goal**: Complete JP drain assessment and strip tubing every hours

### NUTRITION

- **Goal**: Administer D5W0.9 NaCl with 20mEq KC1CL at maintenance
- **Goal**: Refer to Fluid and Electrolyte Guidelines

### MEDICATION

- **Goal**: PCA or Thoracic Epidural as per Acute Pain Services (APS) regimen as tolerated
- **Goal**: If patient is not maintained on acetaminophen as indicated
- **Goal**: NURS procedure only: use Methocel/acetaminophen per protocol
- **Goal**: Food management: Polyethylene Glycol 3350 (PEG 3350)

### ACTIVITY & EDUCATION

- **Goal**: Activity: as tolerated
- **Goal**: Consent for surgery
- **Goal**: Provide education re: pre-operative care for child and caregiver
- **Goal**: Teach parent/caregiver about post-operative care of pectus excavatum repair; consider medical alert bracelet
- **Goal**: Physiologic: deep breathing and coughing, incentive spirometry, activity restrictions teaching, and mobility as tolerated
- **Goal**: Review incision care: leave suture strips until they fall off or remove after 10 days
- **Goal**: Review activity: activities of daily living as tolerated, encourage ambulation, and use of incentive spirometer, and no contact sports for 2-4 months
- **Goal**: Review bathing: may shower or bathe 48 hours after surgery
- **Goal**: Review signs and symptoms of wound infection: fever, redness, drainage, and increasing pain around incision, and fluid accumulations under incision
- **Goal**: 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)
- **Goal**: Review when to call surgeon's office: if signs of wound infection, signs of sepsis (review signs and symptoms with caregiver), increasing chest pain or shortness of breath, and/or recurrences of pectus deformity
- **Goal**: Book follow-up appointment for 6-8 weeks post-op including chest x-ray for NURS procedure, and answer Pectus/NURS card to be provided
References


Attachments:

pectus_final_2019.pdf