Introduction

The purpose of this pathway is to assist the health care team with clinical decisions regarding the management of a patient with intussusception.

Target Population:

- **Inclusion**: Children age 0-18 years old with no underlying disease or comorbidity who have been suspected to have or diagnosed with intussusception.
- **Exclusion**: to be removed from this pathway if child has significant comorbidities, significant postoperative/post procedure complications (eg. bowel obstruction, bowel perforation, or prolonged TPN therapy) or a change in diagnosis.

Target Users:

- Emergency physicians, radiologists, surgeons, residents, fellows, nurse practitioners and nurses on the ward.
**Intussusception Care Pathway**

**Child arrives in ED with suspected Intussusception**

**Does child meet the following criteria?**
- Child is less than 6 months of age
- Length of illness is greater than 24 hours
- Vital signs are abnormal
- Child is dehydrated and lethargic
- History of red currant jelly stools
- Peritoneal signs or abnormal abdominal exam

**Urgent General Surgery consult, start IV and complete blood work**

**Complete Imaging**
- Ultrasound is the exam of choice pre and post treatment (Comprehensive US vs POCUS* (Point of Care Ultrasound))
- Abdominal x-ray is exam of choice when suspecting perforation or there is clinical peritonitis

**Determine type of intussusception**

- **Colonic Involvement**
  - Radiology to notify General Surgery and Emergency MRP to discuss ultrasound
  - Ensure adequate pain management and IV access
  - ED Nurse to accompany patient to Air enema

- **Transient Small Bowel-Small Bowel Intussusception (not the cause of symptoms)**
  - Observe in ED
  - No General Surgery consult required
  - ED team to manage and discharge

- **Persistent Small Bowel-Small Bowel Intussusception**
  - Radiology to notify General Surgery and Emergency MRP to discuss ultrasound
  - Child returns to ED for IV and blood work

**Intussusception caused by past pyloric enteral tubes**

**Surgical management**

**Table 1: Decision to admit/discharge**

<table>
<thead>
<tr>
<th>Decision to admit/discharge</th>
<th>Admission Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Live close to hospital, have a phone to contact a Primary Care Provider, parental reliability, VSS, Afebrile, Normal physical exam, tolerating diet, voiding well, no pain symptoms, idiopathic. Ensure follow up with Primary Care Provider/Pediatrician (follow up with General Surgeon if intussusception recurs).</td>
</tr>
<tr>
<td>No</td>
<td>Unwell (persistent obstructive symptoms eg. Abdominal pain, vomiting), presented with bowel obstruction, had high WBC count at presentation, life in a more remote location, ongoing rectal bleeding, lead point found, incomplete reduction of intussusceptions.</td>
</tr>
</tbody>
</table>

**Follow the Management of GJ and Combination G/G Tube-Related Intussusception pathway for guidance**

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Patients scheduled for surgery typically receive pre and post-surgical care as described below

<table>
<thead>
<tr>
<th>PRE-OPERATIVE</th>
<th>IMMEDIATELY POST-OPERATIVELY</th>
<th>POST-OP DAY #1-2 (to bowel resection): DAY # 3-5 (with total resection)</th>
<th>DISCHARGE: DAY 3 (to bowel resection): DAY 5 (with bowel resection)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Child/ family are advised of pre-op bath. Wipes to be used upon arrival. Refer to procedure document</td>
<td>3. Out of bed</td>
<td>3. Ambulating</td>
<td>3. Able to tolerate NG to drain age camps/ remove</td>
</tr>
</tbody>
</table>

**GOALS**

- Obtain history
- Complete physical exam
- Assess vital signs
- Complete pain assessment (refer to Pain Assessment Guidelines)
- Ensure child has adequate pain control (refer to Pain Management Guidelines)
- Obtain accurate in and out
- Obtain weight and height

**PHYSICAL EXAM**

- Ensure that patient is NPO
- Administer 20 mL of 9% NaCl at maintenance
- Normal saline bolus as indicated
- Refer to Fluid and Electrolyte Guidelines

**DIET & FLUIDS**

- NPO until bowel function present, no abdominal distension, and no nausea/vomiting, then start clear fluids to diet as tolerated
- Administer 20 mL of 9% NaCl at maintenance
- Normal saline bolus as indicated
- Refer to Fluid and Electrolyte Guidelines

**NG TUBE**

- NG tube to low intermittent suction/ straight drain
- May put to straight drainage if clinically indicated (decreased output volume, non-bloody, no nausea)
- May remove when tolerating NG to straight drainage or clamp (no nausea/vomiting, no abdominal distension, and no pain)

**LABS & MEDICATION**

- Complete CBC with differential
- Coagulation, electrolytes, type and screen, and Sickle Cell screen (if indicated)
- Labs as clinically indicated
- IV morphine continuous infusion
- Acetaminophen as indicated for pain/fever
- Continue cefotaxime IV for 24 hours post-op then reassessment
- Ketorolac every 6 hours for pain management for 48 hours (age appropriate and clinically indicated)
- Ampicillin/Trimethoprim 7 days if perforated
- Wean morphine infusion to off (decrease by 5-10 mg every 24 hours)
- If pain/fever, administer acetaminophen as indicated
- Ketorolac/doprophen every 6 hours as needed for pain

**PRINTABLE VERSION**

**Related Documents**

- Care of Patients Receiving Continuous Infusion of Opioids
- Care of Patients Receiving Patient Controlled and Nurse Controlled Analgesia
- SickKids e-formulary

**Implementation Plan**

- Education and awareness building by General Surgery Program (Surgeons, NPs, fellows, nurse educator) at: fellow orientation (once per year) nursing orientation (every 3 months), and residents’ orientation (every month).
- Surgeons to communicate any updates in practice to Division of General Surgery and Radiology.
- Radiologists to communicate any updates in practice to Division of General Surgery and Radiology.
Evaluation Plan

- Length of stay (LOS) evaluation

References


Guideline Group and Reviewers

Guideline Group Membership

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Attachments:

Intussusception final 2021.pdf

Pathway algorithm 2021.pdf