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.
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
- Transient Small Bowel-Small Bowel Intussusception (not the cause of symptoms)
- Persistent Small Bowel-Small Bowel Intussusception

Observe in ED
- No General Surgery consult required; ED team to manage and discharge

Radiology to notify General Surgery and Emergency MRP to discuss ultrasound

Air Enema
- Radiology to notify General Surgery and Emergency MRP to discuss ultrasound

Surgical management

Table 1: Decision to admit/discharge
- Patient should be observed for 2-4 hours in ED and may be discharged if:
  - Live close to hospital
  - Have a telephone 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)

- Patient should be admitted to the hospital when:
  - Unwell (persistent obstructive symptoms eg, Abdominal pain, vomiting)
  - Present with bowel obstruction
  - Had high WBC count at presentation
  - Live in a more remote location
  - Ongoing rectal bleeding
  - Lead point found
  - Incomplete reduction of intussusceptions
  - Patient should have another Ultrasound to rule out recurrent intussusception when they are bacig:
    - Recurrent pain
    - Recurrent vomiting

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

Intussusception Management Pathway

Printable version – Intussusception Management Pathway
Printable version – Tube Related Intussusception Care Pathway
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 resigation); DAY # 5-4 (with total resection)</th>
<th>DISCHARGE: DAY 3 (to bowel resigation); DAY 5 (with bowel resigation)</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. Outed</td>
<td>3. Ambulating</td>
<td>3. Ambulating</td>
</tr>
<tr>
<td>4. Adequate pain control</td>
<td>4. Incision int, no drainage; dry and intact</td>
<td>4. Incision dry &amp; intact</td>
<td>4. Able to tolerate NG to drainage camp/ remove</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5. Family understands discharge teaching</td>
</tr>
</tbody>
</table>

**GOALS**

- Obtain history
- Complete physical exam
- Assess vital signs
- Complete pain assessment (refer to Pain Management 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 200ml 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 250-300ml KCl/L 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 (decrease output volume, non-bilious, no nausea)
- May remove when tolerating NG to straight drainage or clamp no nausea/vomiting, no abdominal distension, and no pain
- NG tube to low intermittent suction/straight drain
- May put to straight drainage if clinically indicated (decrease output volume, non-bilious, no nausea)
- May remove when tolerating NG to straight drainage or clamp no nausea/vomiting, no abdominal distension, and no pain

**LABS & MEDICATION**

- Complete CFC with differential
- Coagulation, electrolytes, type and screen, and Sickie Cell screen (if indicated)
- Labs as clinically indicated
- IV morphine continuous infusion
- Acetaminophen as indicated for pain/fever
- Continue cefotetan IV for 24 hours post-op then reassess
- Ketoxin every 6 hours for pain management for 48 hours (age appropriate clinically indicated)
- Ampicillin/gentamicin/metrocinomicin 7 days if perforated
- Wear morphine infusion to off (decrease by 5-10 mg q6h every 24 hours)
- If pain/no fever, administer acetaminophen as indicated
- Ketorolac/Dexprover every 6 hours as needed for pain

**PRINTABLE VERSION**

**Related Documents**

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

**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.

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Evaluation Plan

- Length of stay (LOS) evaluation

References


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Attachments:

Intussusception final 2021.pdf

Pathway algorithm 2021.pdf