	Document Scope: Hospital-wide Patient Care	
	Document Type: Clinical Practice Guideline Approved on 2017-06-30 Next Review Date: 2020-06-29	
	Intussusception Care Pathway	Version: 1

1.0 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 diagnosed with intussusception by the General Surgery Team.
- **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 and nurses on the ward.

2.0 Definitions

- SB - small bowel
- ER - emergency room
- U/S – ultrasound
- MD - medical doctor
- VSS - vital signs stable

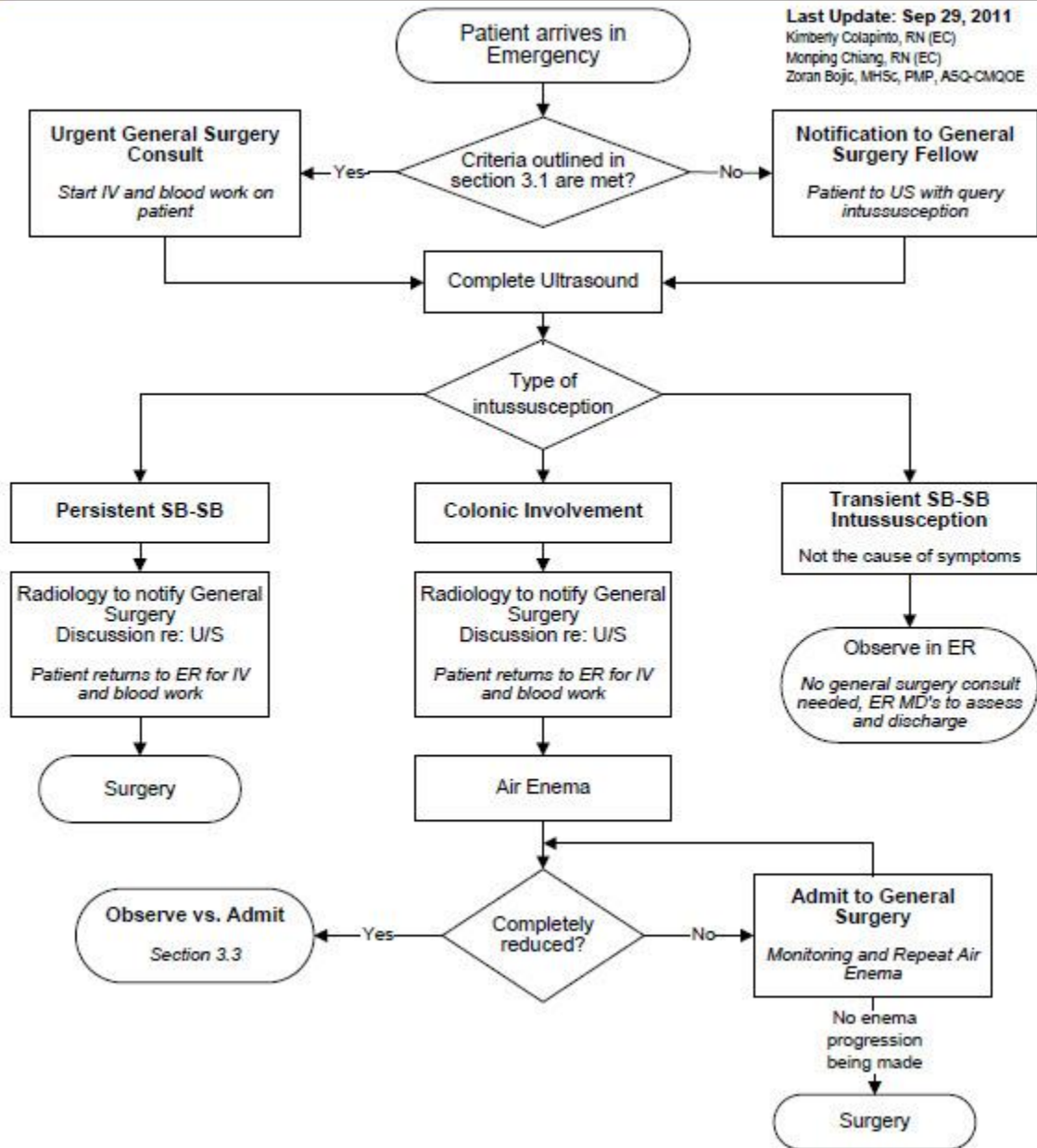
3.0 Clinical Practice Guideline


This pathway was developed by an interdisciplinary clinical group from SickKids using research knowledge, clinical experience and consensus agreement. This pathway is a general guideline and does not represent a professional care standard governing providers' obligations to patients. Care is revised to meet individual patient needs. This pathway is based on **Level C evidence: Expert Opinion**.

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3.1 Urgent call to General Surgery and Start IV and blood work

- 3.1.1 Child is less than 6 months of age
- 3.1.2 Length of illness is greater than 24 hours
- 3.1.3 Vital signs are abnormal
- 3.1.4 Child is dehydrated and lethargic
- 3.1.5 History of red currant jelly stools
- 3.1.6 Peritoneal signs or abnormal abdominal exam

3.2 Imaging choices

- 3.2.1 Ultrasound is the exam of choice pre and post treatment
- 3.2.2 Abdominal x-ray is exam of choice when suspecting perforation or there is clinical peritonitis

3.3 Decision to admit/discharge

3.3.1 Patient should be observed for 2-4 hours in ER and may be discharged if:

- 1) Live close to hospital
- 2) Have a telephone to contact hospital
- 3) Parental reliability
- 4) VSS, Afebrile
- 5) Normal physical exam
- 6) Tolerating diet
- 7) Voiding well
- 8) No pain symptoms
- 9) Idiopathic


**ensure follow up with family MD/pediatrician (follow up with general surgeon if intussusception recurs)

3.3.2 Patient should be admitted to the hospital when:

- 1) Unwell (persistent obstructive symptoms eg. Abdominal pain, vomiting)
- 2) Presented with bowel obstruction
- 3) Had high WBC count at presentation
- 4) Live in a more remote location
- 5) Ongoing rectal bleeding
- 6) Lead point found
- 7) Incomplete reduction of intussusceptions

3.3.3. Patient should have another ultrasound to rule out recurrent intussusception when they are having:

- 1) Recurrent pain
- 2) Recurrent vomiting

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3.4 Intussusception caused by jejunal enteral tubes


- 3.4.1 Remove jejunal enteral tube
- 3.4.2. Reinsert jejunal enteral tube
- 3.4.3 Reimage to ensure appropriate tube placement

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

INTUSSUSCEPTION CARE PATHWAY		PRE-OPERATIVE	IMMEDIATELY POST-OPERATIVELY	POST-OP DAY # 1-2 (no bowel resection); DAY 1-4 (with bowel resection)	DISCHARGE: DAY 3 (no bowel resection); DAY 5 (with bowel resection)
GOALS		1. Hydration maintained 2. Patient prepared for OR	1. Afebrile 2. Adequate pain control 3. Out of bed 4. Incision intact, no drainage; dry and intact	1. Afebrile 2. Adequate pain control 3. Ambulating 4. Able to tolerate NG tube to drainage/clamp/remove 5. Incision dry & intact	1. Afebrile X 24 hours 2. Adequate pain control 3. Ambulating 4. Able to tolerate diet 5. Incision dry and intact 6. Patient/ caregiver teaching completed
PHYSICAL EXAM		Obtain history Complete physical exam Assess vital signs Complete pain assessment (refer to Pain Assessment Guidelines) Obtain accurate in and out Obtain height and weight Assess stool color and consistency	Complete pain assessment (focus on abdominal) every 4 hours Ensure child has adequate pain control (Refer to Pain Management Guidelines) Monitor vital signs every 4 hours Complete wound assessment Assess stool color and consistency	Ensure child has adequate pain control (Refer to Pain Management Guidelines) Complete pain assessment (focus on abdominal) every 4 hours Monitor vital signs every 4 hours Obtain accurate in and out Complete wound assessment (remove surgical dressing, leave steri strips) Assess stool color and consistency	
LABS		Complete CBC with differential Coagulation Electrolytes Group and screen Sickle Cell screen (if indicated)	As clinically indicated	As clinically indicated	
IV FLUIDS		Administer at one and half maintenance (DSW & 0.9 NaCl with 20 mmol KCL/L) Normal saline bolus as indicated Refer to Fluid and Electrolyte Management Guidelines	Administer at maintenance (DSW and 0.9 NaCl with 20mmol KCL/L) Normal saline bolus as indicated Refer to Fluid and Electrolyte Management Guidelines	Maintenance, TKVO once adequate oral fluid intake	
MEDICATION		Cefoxitin IV on chart to OR; if allergy then Gentamicin & Metronidazole. Refer to the e-formulary Pain medication as needed: morphine/acetaminophen/NSAIDs. Refer to the e-formulary	Morphine IV continuous infusion Acetaminophen as needed for pain/fever Continue Cefoxitin IV for 24 hours post-op then reassess Ketorolac every 6 hours for pain management for 48 hours (age appropriate and clinically indicated) Ampicillin/Gentamicin/Metronidazole X 7 days if perforated	Wean morphine infusion to off (decrease by 5-10mcg every 6 hours) If pain/fever, administer Acetaminophen as indicated Ketorolac/buprenorphine every 6 hours as needed for pain	If needed, provide prescription for oral pain medication If needed, provide prescription for oral antibiotics
DIET		Ensure patient is NPO	NPO until bowel function present, no abdominal distention, and no nausea/vomiting Then can start clear fluids to diet as tolerated	NPO until bowel function present, no abdominal distention, and no nausea/vomiting Then can start clear fluids to diet as tolerated	Diet as tolerated
ACTIVITY		Activity as tolerated	Out of bed to chair Ambulating in hallway X 5	Out of bed to chair Ambulating in hallway X 5	
NASOGASTRIC (NG) TUBE			NG tube to low intermittent suction May put to straight drainage if clinically indicated (decreased output volume, non bilious, no nausea) May remove when tolerated NG to straight drainage (no nausea/vomiting, no abdominal distention, and no pain)	NG tube to low intermittent suction May put to straight drainage if clinically indicated (decreased output volume, non bilious, no nausea) May remove when tolerated NG to straight drainage (no nausea/vomiting, no abdominal distention, and no pain)	
EDUCATION		Consent for surgery Pre-op procedures for patient and child	When diet will be started Review need for pain management Review importance and need for ambulation Review need for parental involvement in care	Review incision care: Leave SteriStrips until fall off on own or remove after 10 days; once steri strips removed may wash incision gently with soap & water Review bathing: May shower or bathe 48 hours after surgery May swim 48 hours post surgery May return to normal daily activities as tolerated Review signs and symptoms of wound infection: 1. Fever 2. Redness around incision 3. Drainage from incision 4. Increasing pain around incision Review signs of recurrence: 1. Abdominal pain/irritability 2. Diarrhea 3. Bloody/current jelly stool 4. Vomiting 5. Abdominal distention	Review when to call surgeon's office: 1. Wound infection 2. Vomiting 3. Fever 4. Abdominal pain 5. Blood in stool Review risk of recurrence (approx. 10% usually within first 48 hours) Follow-up appointment with surgeon in 6-8 weeks Review post-op teaching

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4.0 Related Documents

[Care of Patients Receiving Continuous Infusion of Opioids ==>](#) 

[Care of Patients Receiving Patient Controlled Analgesia ==>](#) 

[SickKids e-formulary](#)

5.0 Implementation & Evaluation Plan

5.1 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.

5.2 Evaluation Plan


- Length of stay (LOS) evaluation

6.0 References

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7.0 Guideline Group and Reviewers

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Attachments:

[intussusception June 20 2017.pdf](#)