

# IRISH ASSOCIATION FOR EMERGENCY MEDICINE



IAEM Clinical Guideline



Children's Health Ireland

## **Intussusception: Management of Patients Presenting to the Emergency Department**

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### **DISCLAIMER**

IAEM recognises that patients, their situations, Emergency Departments and staff all vary. These guidelines cannot cover all clinical scenarios. The ultimate responsibility for the interpretation and application of these guidelines, the use of current information and a patient's overall care and wellbeing resides with the treating clinician.

## Revision History

Date	Version	Section	Summary of changes	Author
May 2026	1.0	All	Final version	PC/LM/AM

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## GLOSSARY OF TERMS

CSL	Compound Sodium Lactate
FBC	Full Blood Count
G&H	Group & Hold
HSP	Henoch Schonlein Purpura
IV	Intravenous
US	Ultrasound
U&E	Urea & Electrolytes

## PARAMETERS

**Target audience:** Medical professionals working in emergency departments in the assessment of children with undifferentiated illnesses.

**Patient population:** Patients <18 years of age presenting with suspected or diagnosed intussusception.

**Exclusion criteria:** Age <16 years

## AIMS

The aim of this document is to provide guidance to clinical staff involved in the first line assessment and management of children presenting to the Emergency Department with history and clinical findings suggestive of intussusception. For Emergency Departments without access to paediatric specialty services, this includes guidance on initial stabilisation and timely transfer to an appropriate specialist centre.

# Intussusception: Management of Patients Presenting to the Emergency Department

## INTRODUCTION

Intussusception is a common cause of intestinal obstruction in young children. It most commonly occurs between 3 months and 3 years of age but can occur at any age. It is defined as the telescoping or invagination of one part of the intestine into the lumen of the adjoining distal part. This process leads to bowel obstruction, venous congestion and bowel wall ischaemia.

The diagnostic features include:

- Presence of risk factors
- Colicky abdominal pain
- Vomiting
- Palpable abdominal mass
- Lethargy/irritability in between episodes of pain
- Blood per rectum/redcurrant jelly stools

## RISK FACTORS

- Male sex
- Age 3 months to 3 years
- Recent viral illness
- Immunoglobulin A (IgA) vasculitis
- Potential lead point (e.g., Meckel's diverticulum, HSP, lymphoma, luminal polyps seen in Peutz-Jeghers syndrome)
- Recent bowel surgery

- Recent rotavirus vaccination
- Previous intussusception (may present with more subtle symptoms)

## ASSESSMENT

### History

Almost all infants with intussusception present with abdominal pain and vomiting. The classic triad of intermittent abdominal pain, palpable abdominal mass and red currant jelly stools occurs in only 1/3 of children. While an intussusception can occur at any age the most common onset is between 3 months and 3 years.

Typically children will experience alternating episodes of very severe, crampy, colicky abdominal pain followed by periods with no pain. The child may appear very well between episodes. Children unable to communicate verbally may draw their knees up to their chests and cry and have associated pallor. Lethargy may be the only presenting symptom. It may be profound, episodic or persistent. They may have a history of a recent viral illness.

Vomiting is usually a prominent feature (but bile-stained vomiting is a late sign and indicates a bowel obstruction). Rectal bleeding or the classic “red currant jelly” stool are late signs caused by venous engorgement and mucosal congestion but can occasionally indicate bowel ischemia and infarction. The absence of blood per rectum/redcurrant jelly stools does not preclude a diagnosis.

### Physical Examination

- Pallor
- Lethargy, may be intermittent, may look well in between episodes
- Abdominal mass: sausage shaped mass in right upper quadrant of abdomen
- Distended abdomen
- Hypovolaemic shock
- Bloody stools

## MANAGEMENT

Management will vary depending on the specialty services available on site. Emergency Departments without paediatric medical, surgical, or radiological services should prioritise early recognition, prompt resuscitation and stabilisation, and urgent liaison with a regional paediatric surgical centre to arrange transfer for definitive management. [Figure 1](#) provides a further overview on the management of these patients.

History and examination suggestive of intussusception.

Proceed with:

- **Obtain IV access**
  - Blood glucose
  - Venous blood gas (VBG) for lactate FBC, U&E
  - Blood group and hold prior to theatre
- **Analgesia and nil by mouth**
- **Notify** senior emergency doctor and surgical team

### Sign of shock or hypovolemia

- Intravenous (IV) Fluid Resuscitation: 10mls/Kg Hartmann's (CSL) bolus
- Repeat as necessary

### Sign of bowel obstruction or perforation

- **Urgent Surgical Review**
- Management as per local surgical team
- IV Fluids Maintenance CSL

- IV antibiotics in consultation with surgical team (Amoxicillin IV, Gentamicin IV plus Metronidazole IV)
- Nasogastric tube on free drainage

#### **If no sign of bowel obstruction or perforation and high clinical suspicion of intussusception**

- Ultrasound abdomen (US)
- Antibiotics are not recommended for uncomplicated cases

#### **If US positive for intussusception**

- **Urgent** Surgical Review
- Management as per local surgical team
- IV Fluids Maintenance CSL
- Nasogastric tube on free drainage
- Air enema +/- laparoscopy/laparotomy if irreducible or if perforation develops

#### **If US negative for intussusception**

- Consider alternative diagnosis (including self-reduced intussusception)
- +/- admission for observation if clinical concern

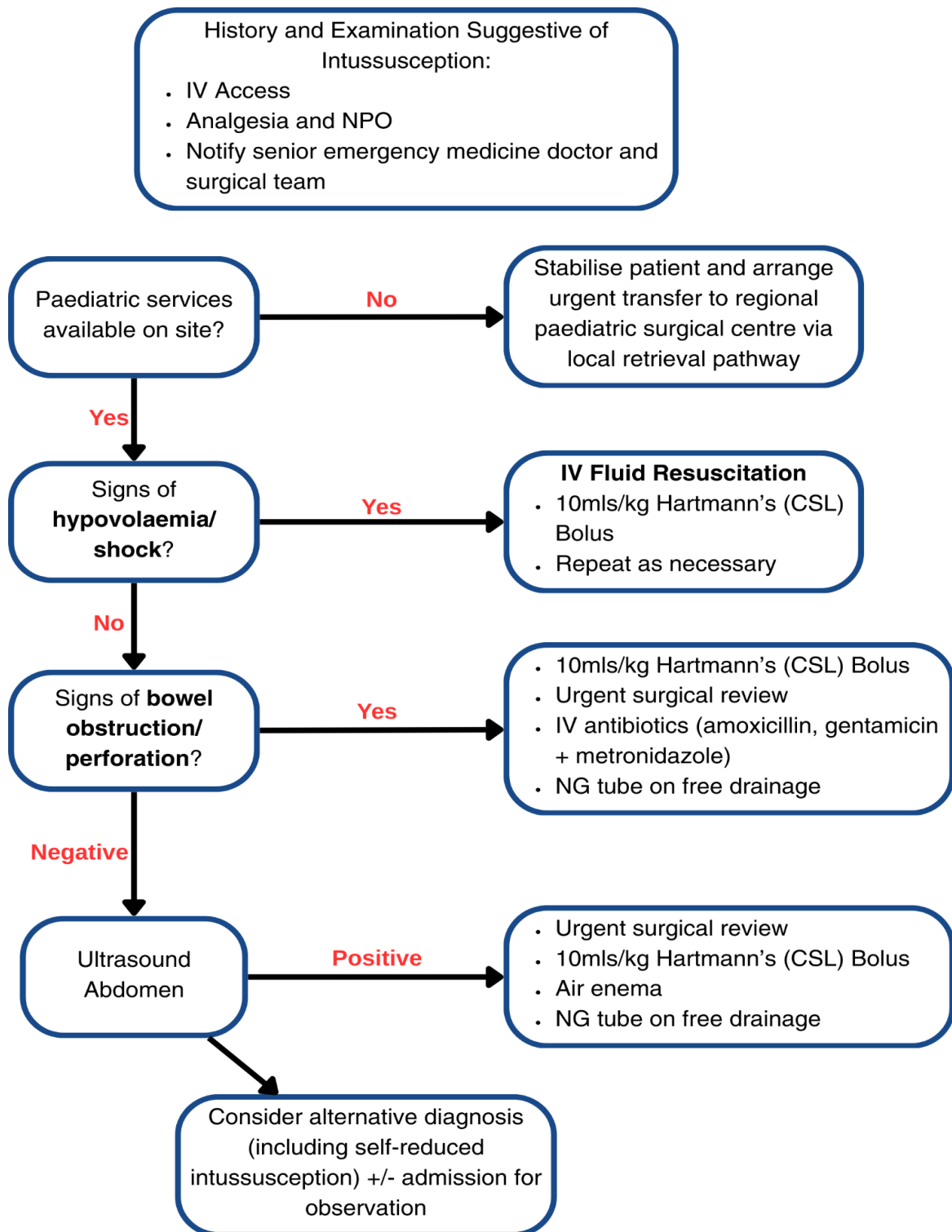


Figure 1: Flowchart of the management of patients in the Emergency Department with suspected Intussusception

## SPECIAL CONSIDERATIONS

- Contraindications to air enema are perforation or clinical evidence of peritonitis

## REFERENCES

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