

LRI Children's Hospital

Intussusception

Staff relevant to:	Nursing staff and medical teams. These guidelines apply to paediatric patients within UHL Children's Hospital only.
Team approval date:	April 2023
Version:	6
Revision due:	April 2026
Reviewed by:	H Dagash
Trust Ref:	C124/2016

1. Introduction and Who Guideline applies to

Intussusception is a common surgical emergency where part of the bowel telescopes into itself causing acute bowel obstruction with a consequent inflammatory process. The commonest age ranges from 4 months to 2 years with equal incidence between males and females, but intussusception can occur outside this age range especially where there is an underlying problem such as cystic fibrosis.

Symptoms include irritable infant, drawing up of knees followed by lethargy, vomiting, and a late sign is stool mixed with blood and mucous (red currant jelly).

On examination, findings maybe absent but could include a RUQ sausage shaped mass, pallor, abdominal distention or hypovolaemic shock.

2. Guideline Standards and Procedures

Actions:

- Accept child.
- History and examination on admission
- Secure IV access
- Give 0.9% NaCl: 10-20 ml/kg over 1 hour
- Insert nasogastric tube
- IVI maintenance fluid - volume depends on weight
- Solution: 0.9% Saline+ 5% Glucose
- 10 mml KCL 500ml bag or bottle

Investigations:

Abdominal ultrasound
Full blood count
U & E's
Blood gas
Cross match 1 unit/group and save

Checklist for air enema:

Morphine
Naloxone (for reversal)
Oxygen supply
Sats monitor
Cefuroxime and Metronidazole IV (one dose)
Large bore cannula (in case perforation occurs)
Resus trolley in room
Consider informing theatre team +/- anaesthetist prior to reduction
APLS trained nurse to accompany

Drug Doses:

Morphine sulphate (age > 1 month)
100 micrograms / kg intravenous injection over at least 5 mins

Naloxone
100 micrograms / kg (max per dose 2 mg). Can be repeated at 1 minute intervals to a maximum of 2 mg.

Treatment Options:

1. Air enema reduction with Morphine sedation
2. Laparotomy and open reduction if air enema fails, or as primary procedure.

Please note the above choices depend on the condition of the patient and the state of the obstruction.

Contraindications for air enema: Perforation, peritonitis or haemodynamically unstable

Generally, the longer the intussusception period the less are the chances of reducing it without an operation either by air reduction or enema with ultrasound.

Laparotomy will be performed as an emergency following full resuscitation with plasma fluids and antibiotics.

Antibiotics: Cefuroxime and Metronidazole 1 dose at the start of the procedure - refer to BNFC for dosing information.

Post reduction Treatment:

1. Air enema

NBM 6-8 hours

Fluids

Feed

Home 24 - 48 hours.

Repeat US if symptoms recur

2. Laparoscopy/Laparotomy See chart in patient's notes

Follow-up:

Out-patient 4-6 weeks post-op.

No follow-up if the intussusception was reduced by air reduction or enema but explain to parents the risk of 5-10% recurrence.

3. Education and Training

None

4. Monitoring Compliance

None identified at present

5. Supporting References

Paediatric Surgery, 4th Edition, Ed: Keith Ashcraft. 2005. p 533-542.

6. Key Words

Bowel obstruction, Intussusception

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs. As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

CONTACT AND REVIEW DETAILS	
Guideline Lead (Name and Title) Mr H. Dagash - Consultant	Executive Lead Chief medical officer
Details of Changes made during review: Added the following - <ul style="list-style-type: none"> • blood gas under investigations • secure IV access under actions • resus trolley in room under air enema checklist • consider informing theatre team +/- anaesthetist prior to reduction under air enema checklist • APLS trained nurse to accompany under air enema checklist • drug doses for morphine and naloxone • contraindications for air enema • examination findings under introduction 	