South Thames Paediatric Network

# General Paediatric Surgery: Intussusception

## Overview

Intussusception most commonly presents between 5 weeks – 5 months of age, can present at any age although outside 3 months to 3 years, alternative diagnoses are more likely. This guideline has been created to advise clinicians in peripheral hospitals regarding pre-transfer diagnosis and management of this condition.

## Clinical assessment

### History

- Classically presents with colicky abdominal pain with drawing up of legs in pain, followed by episodes of lethargy in between. Can also present as a collapsed child with a history of abdominal pain/drawing up legs
- Vomiting, which may be bilious
- No stool, flatus or passage of redcurrant jelly stool (fresh blood mixed with mucus) which is a late sign
- Often have a preceding viral illness

### Physical examination

- Airway, Breathing, Circulation, Disability and check blood glucose
- Assess for signs of shock; heart rate, capillary refill time, urine output and dehydration; skin turgor, fontanelle
- Abdominal examination – "sausage shaped" mass may be felt in the right upper quadrant
- Rectal examination – may visualise intussuscepted bowel per rectum, important to exclude anal fissure as common cause of blood per rectum

## Investigations

- Cannula insertion + bloods for full blood count, urea & electrolytes, c-reactive protein and blood gas
- Abdominal x-ray – look for evidence of small bowel dilatation and paucity of distal gas consistent with obstruction
- Abdominal ultrasound – look for evidence of intussusception. If ultrasound is not available at your centre and there is a highly index of clinical suspicion contact paediatric surgical registrar at your designated primary tertiary centre
- **If the child is transferred for diagnostic ultrasound, please hold their bed. If the ultrasound rules out intussusception the patient can be transferred back to the DGH for ongoing management as long as they**

## Differential diagnosis (especially when child is outside 3 month to 3 year age range)

- Anal fissure - younger age and history of difficulty/pain passing stool
- Cows milk intolerance - consider if baby is otherwise well and settled and if they are less than 6 months

If clinical concerns of cardiovascular shock (prolonged capillary refill time, tachycardia, hypotension, failure to respond to >20ml/kg fluid resuscitation) then consider contacting STRS.
Guidelines can be found here:
https://www.evelinalondon.nhs.uk/our-services/hospital/south-thames-retrieval-service/clinical-guidelines.aspx

## Management

- Fluid resuscitation
  - 20ml/kg bolus of 0.9% sodium chloride if shocked. Repeat bolus as necessary according to clinical status (heart rate/capillary refill time).
  - Full IV maintenance fluids – 0.9% sodium chloride + 5% glucose + 10mmol potassium chloride /500ml
  - Replace NG losses ml for ml – 0.9% sodium chloride + 10mmol potassium chloride/500ml
- Keep nil by mouth
- Nasogastric tube insertion (minimum 8Fr, ideally 10Fr if possible) and place on free drainage
- Prescribe broad spectrum antibiotics to cover sepsis as per local protocol
- Contact paediatric surgical registrar on call at receiving tertiary centre with results of bloods, radiology and most recent observations.
- Once a bed is confirmed at receiving tertiary centre, please arrange safe transfer of the child with two cannulas, IV fluids, nasogastric tube on free drainage and copies of documentation from your centre.
- Ensure images taken at your centre are linked to the receiving tertiary centre by contacting your PACS department.

Level of care and the urgency with which input is required:
**Emergency transfer**
**Referral accepted within 30 minutes**
**Surgical input within 6 hrs**

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