



## PAEDIATRIC ACUTE CARE GUIDELINE

### Constipation

<b>Scope (Staff):</b>	All Emergency Department Clinicians
<b>Scope (Area):</b>	Emergency Department

This document should be read in conjunction with this DISCLAIMER  
<http://kidshealthwa.com/about/disclaimer/>

## Constipation

Constipation is a symptom not a disease. Constipation refers to infrequent bowel movements or hard to pass faeces.

## Background

- Constipation in children is most commonly due to a functional cause (95%)
- Although rare, some causes of constipation are potentially life threatening

## General

### Constipation can present as:

- History of infrequent stools (< 3 stools per week)
- Large and/or hard stool associated with painful defaecation
- Intermittent abdominal pain
- Incomplete evacuation of rectal content
- Involuntary soiling
- Inability to pass stool

## Normal stool pattern

- A breast fed baby may pass a stool after every feed ranging to a stool only every 7-10 days
- A bottle fed baby and older child will usually pass a stool every 1-2 days
- See Bristol Stool Chart



- Types 1 and 2 indicate constipation
- Types 3 and 4 indicate the ideal stool
- Types 5-7 indicate potential diarrhoea

## Red Flags

- Possible organic causes, requiring further investigation

History
<ul style="list-style-type: none"> <li>• Delayed passage of meconium for more than 48 hours</li> <li>• Constipation present from birth or early infancy</li> <li>• Failure to thrive, significant weight loss</li> <li>• Abdominal distention, bilious vomit or ileus</li> <li>• Child is systemically unwell, fever, vomiting</li> <li>• Fatigue, polyuria, polydypsia</li> <li>• Urinary incontinence</li> <li>• Extraintestinal symptoms</li> </ul>
Examination
<ul style="list-style-type: none"> <li>• Lower spine abnormalities</li> <li>• Decreased lower limb tone, reflex or strength</li> <li>• Unexplained abdominal or pelvic mass</li> <li>• Patulous anus, anal prolapse, anteriorly placed anus</li> <li>• Blood in stool not attributed to anal fissure</li> <li>• Representation, or failed standard treatment</li> </ul>

## Assessment

### History

The evaluation of the child presumed to have constipation should begin with a thorough

history and physical examination with special attention to [red flags](#)

- Age of onset of constipation, duration, frequency of episodes, time of first meconium after birth
- Stool frequency, consistency and size (see [Bristol Stool Chart](#))
- Defaecation – painful or straining
- Any blood on stool or toilet paper
- Precipitating factors- diet, environment, psychosocial history, etc
- Any stool incontinence – encopresis, soiling, overflow, diarrhoea
- Associated abdominal pain or vomiting
- Child's general health and associated recent illness, failing to thrive, developmental history, etc
- Treatment/medication used and response

## Examination

- Digital rectal examination is **not** routinely performed by Emergency Department Clinicians

## Investigations

- An abdominal X-Ray is rarely indicated, although exceptions may include:
  - Child with faecal soiling who does not have a faecal mass palpable
  - Child who is markedly obese

## Management

- A general rule of thumb is that treatment is required to maintain soft stools for as long as the patient has been constipated (e.g. if constipated for one year, it is likely they will require treatment for a year)

### Initial management

- Disimpaction is necessary before initiation of maintenance therapy

### Disimpaction

- The oral approach to disimpaction is not invasive and gives a sense of power to the child, but adherence to the treatment regimen may be a problem.
- The rectal approach to disimpaction is faster but is invasive.
- The oral and rectal approach may both be required.

- The choice of treatment is best determined after discussing the options with the Emergency Department Senior Doctor and the family.
- Ensure the patient is provided with a [Constipation Management Plan](#), completed using the information below

### Rectal Disimpaction

#### Glycerol suppository BP (700mg infant size)

- < 1 year old
- Insert rectally and allow for response after 15-30 minutes

### Enemas

- Enemas are usually reserved for children with severe rectal pain or distress due to faecal impaction
- Discuss use with Emergency Department Senior Doctor

#### Phosphate enemas (Fleet®)

- Contraindicated in <2 years old, Hirschsprung's disease, congenital megacolon, or renal failure
- The sodium phosphate enemas (Fleet®) should be given in a dose of 3mL/kg of body weight. Maximum one enema (approximately 130mL)
- Fleet® enema can be repeated after 12 hours

#### Microlax®

- Suitable for children > 1 month old
- Dose: 5mL rectal as a single dose
- Insert only half the nozzle length for children < 3 years

### Oral Disimpaction

- Movicol® is the recommended laxative
- Use Movicol Adult (Macrogol 3350 13.125g/sachet), which is equivalent to **two Movicol Junior** sachets
- Palatability is improved by mixing sachet with juice
- Disimpaction usually takes 3-5 days, and then commence maintenance dose

### Movicol Dosage:

Age	Day 1	Day 2	Day 3	Day 4	Day 5
<b>Under 1 year old</b>	1/4 Sachet	1/2 Sachet	1/2 Sachet	1/2 Sachet	1/2 Sachet
<b>1 - 5 years old</b>	1 Sachet	2 Sachets	2 Sachets	3 Sachets	3 Sachets

<b>6 - 12 years old</b>	2 Sachets	3 Sachets	4 Sachets	5 Sachets	6 Sachets
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Consider admission for oral or nasogastric colonic lavage if:

- Disimpaction is not achieved with the rectal or oral medication
- Large amounts of faeces are palpable through the abdominal wall
- **Recommended:** ColonLYTELY® 25 mL/kg/hour (maximum 1L/hour, not to exceed 3L daily)
  - Orally or via nasogastric tube over 10 hour period
  - Repeat as necessary to clear the colon

## Further management

- Behavioural modification should include regular scheduled toileting for approximately five minutes after each meal

## Maintenance Treatment

- First Line Laxative treatment
  - Children < 2 years; stool softener and/or osmotic laxative
  - Children > 2 years; osmotic laxative
- Movicol is the recommended laxative
- Long term treatment needs to be under the supervision of the child's local doctor

	Medication
<b>Osmotic Agent</b>	<p><b>Movicol® (Adult)</b> – Chocolate flavoured Movicol (Adult) is available</p> <ul style="list-style-type: none"> <li>• &lt; 1 year: 1/4 – 1/2 sachet / day</li> <li>• 1-6 years: 1/2 – 1 sachet / day</li> <li>• 6-12 years: 1 – 2 sachets / day</li> <li>• &gt; 12 years: 2 sachets / day</li> </ul> <p><b>OsmoLax®</b></p> <ul style="list-style-type: none"> <li>• 1-5 years: 1/2 – 1 scoop / day</li> <li>• 6-12 years: 1 – 2 scoop / day</li> </ul> <p><b>Lactulose or Sorbitol</b></p> <ul style="list-style-type: none"> <li>• &lt; 1 year: 2.5 mL BD</li> <li>• 1-5 years: 2.5 – 10mL BD</li> <li>• &gt; 5 years: 5 – 20mL BD</li> </ul> <p>Up to 1.5mL/kg BD. Daily maximum is 60mL.</p>

<b>Stool softener</b>	<b>Coloxyl®</b> <ul style="list-style-type: none"> <li>• &lt; 6 months: 0.3mL TDS</li> <li>• 6-18 months: 0.5mL TDS</li> <li>• 18-36 months: 0.8mL TDS</li> </ul> <b>Parachoc®</b> <ul style="list-style-type: none"> <li>• 1-6 years: 10-15mL / day</li> <li>• 6-12 years: 20mL / day</li> <li>• &gt; 12 years: 40mL / day</li> </ul>
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## Tags

abdo, abdomen, abdominal, blockage, bowel, bristol stool chart, constipation, defecate, diarrhoea, enema, faecal, faeces, gastro, gastrointestinal, hirschsprung's, laxative, meconium, pain, poo, soiling, stool, vomiting


## References

PMH ED Guideline: Constipation. Last Updated January 2015

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3. Sood MR. Constipation in children: Aetiology and Diagnosis. (2014) *UpToDate*. Accessed [www.uptodate.com](http://www.uptodate.com).
4. AMH Children's Dosing Companion (online). Adelaide: Australian Medicines Handbook Pty Ltd; 2014 July. Available from: <https://childrens.amh.net.au>
5. WA Health. Princess Margaret Hospital for Children GP Pre-Referral Guidelines. 2.0 Constipation – October 2013
6. Heaton, K W & Lewis, S J 1997, 'Stool form scale as a useful guide to intestinal transit time'. *Scandinavian Journal of Gastroenterology*, vol.32, no.9, pp.920 – 924.

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