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Dear Andrew

RE Official Information Act request CDHB 10777

I refer to your four emails dated 25 November 2021 to the Ministry of Health which they subsequently transferred to us on 9 December 2021 requesting the following information under the Official Information Act from Canterbury DHB. Specifically:

1. Please provide Guidelines/Procedures for the management of postoperative Urinary Retention (POUR)

Guidelines and procedures are in the HHP Acute Urinary Retention pathway on Canterbury Hospital HealthPathways (**Note** ¹). Please refer to **Appendix 1**.

2. Please provide Guidelines/procedure for the management/prevention of persistent Postsurgical Pain.

The Canterbury DHB does not have guidelines or written procedures for the prevention or management of chronic post-surgical pain. Specialist staff are educated on acute and chronic pain management as part of their training and have access to resources such as the ANZCA publication "Acute Pain Management: Scientific Evidence" https://www.anzca.edu.au/resources/college-publications/acute-pain-management/apmse5.pdf."

3. Please provide Guidelines/procedure in the treatment of patients after a suicide attempt and/or suicidal ideation

An individualised approach is taken when providing care to a person who has attempted suicide or expresses suicidal ideation. This is because we need to respond to the diverse reasons people have for attempting suicide, different life circumstances, levels of whānau support, and their differing needs.

For instance, some suicide attempts occur in the context of a major life event and there may be less ongoing risk afterwards, compared with someone who has constant symptoms of severe depression or psychosis. However, in general the following steps are taken:

- Any potentially life-threatening injuries or conditions are given immediate priority
- An assessment is then undertaken which includes the person's clinical presentation, circumstances, level of risk, and wishes
- A plan is established in conjunction with the person and their whānau

• Information on managing mental illness and/or addictions, and support services available, is then provided.

The plan developed for an individual may or may not include follow up by Specialist Mental Health Services (SMHS), but SMHS will be involved in a person's ongoing care if they show signs of moderate to severe mental illness. This could take the form of an inpatient admission, or outpatient care in the community. Care for mild to moderate mental illness is available through primary care and NGO providers.

4. Please provide Guidelines/procedure differentiating subtypes of primary (idiopathic) constipation"

Guidelines and procedures are in the Constipation in Adults pathway on Canterbury Hospital HealthPathways (**Note** ¹). Please refer to **Appendix 2**.

Guidelines and procedures are in the Constipation in Children pathway on Canterbury Community HealthPathways (**Note** ¹). Please refer to **Appendix 3**.

<u>Note 1</u> Hospital HealthPathways is designed and written for use during a clinical consultation. Each pathway provides clear and concise guidance for assessing and managing a patient with a particular symptom or condition. Pathways also include information about making requests to services in the local health system. Content is developed collaboratively by general practitioners, hospital clinicians, and a wide range of other health professionals. Each pathway is evidence-informed, but also reflects local reality, and aims to preserve clinical autonomy and patient choice. HealthPathways serves to reduce unwarranted variation and accelerate evidence into practice. The pathways are part of a large suite of clinical and process guidelines and are supported by background documents. They are intended to be used in that context. This information is not publicly available.

Information which is publicly available can be found on the Canterbury HealthInfo website. www.healthinfo.org.nz.

I trust that this satisfies your interest in this matter.

Please note that this response, or an edited version of this response, may be published on the Canterbury DHB website after your receipt of this response.

Yours sincerely

Ralph La Salle

Senior Manager, OIAs

Canterbury DHB and West Coast DHB



Acute Urinary Retention

See also Urethral Catheterisation.

Red flags

- Cauda equina syndrome
- Gross haematuria
- Postobstructive diuresis

Background

About acute urinary retention

About acute urinary retention

Information Act Acute urinary retention refers to the inability to voluntarily pass urine. It is more common in men, especially those of increasing age.

Assessment

Initial assessment

- 1. History:
 - Ask about symptoms Always suspect urinary retention in any patient with unexplained abdominal pain, nausea or vomiting, or confusion.

under the

- Check urine output.
- Palpate the lower abdomen.
- 3. Arrange a bladder scan if available.
- 4. If patient has no urine output:
 - Confirm the diagnosis by either a palpable, large dull mass in the lower abdomen or evidence of full bladder via imaging (estimated to contain greater than 500 mL of fluid).
 - Arrange urgent catheterisation before further clinical evaluation.

Further assessment

1. Look for:

any underlying causes.

Causes

- Previous outflow obstruction symptoms and duration
- Previous or current episodes of haematuria, especially macroscopic with clot retention
- Previous prostate disease, e.g. benign prostatic hyperplasia (BPH)
- Previous surgery or trauma to the pelvis, urinary tract, or spine
- Any dysuria or flank pain, e.g. urinary tract infection (UTI), pyelonephritis
- Cauda equina syndrome symptoms See Low Back Pain.
- Medications, e.g. anticholinergics or sympathomimetics
- significant risk factors for urethral damage.

Potential risks for urethral catheterisation

Urethroplasty or radical prostatectomy within the preceding 6 weeks

Urethroplasty or radical prostatectomy

If it occurred:

- within the last 6 weeks, this surgery indicates the presence of a urethral graft or anastomosis. Catheterisation should therefore be performed by a Urology Registrar if available. If unavailable, medical staff to insert a suprapubic catheter.
- more than 6 weeks ago, proceed with urethral catheterisation with care using 14 Fr catheter. If unsuccessful, insert a suprapubic catheter.
- Urethral traumain the last 4 weeks
- Known uretriral stricture
- History of difficult urethral catheterisation

2. Examination:

- Consider performing a rectal examination to assess prostate size, consistency, and anal tone.
- Do a neurological evaluation.
- 3. Arrange investigations:
 - Urine (once available) for microscopy, culture, and sensitivities
 - Serum creatinine for renal failure
 - Electrolytes (baseline) for postobstructive diuresis with electrolyte disturbance

Postobstructive diuresis

Postobstructive diuresis can occasionally occur after relief of a urinary tract obstruction. It is commonly preceded by bilateral ureteric obstruction. Whilst most patients will self-resolve in less than 24 hours, it is dangerous because some patients will continue to lose salt and water, leading to dehydration, electrolyte imbalances and shock. The clinical definition of postobstructive diuresis is a urine output of more than 200 mL/hour for 2 consecutive hours or more than 3L/day.

Management

- 1. If no urine output or no significant risk factors for urethral damage, catheterise as soon as possible. If risk factors are present, seek acute urology advice.
- 2. If cauda equina syndrome is suspected, request urgent acute neurosurgery review.
- 3. If retention is:
 - preceded by gross haematuria, manage as per Macroscopic Haematuria Clinical Pathway.
 - without haematuria, place size 16 French gauge urethral catheter. Do not attempt
 to pass the urethral catheter more than 2 times If unsuccessful, seek acute
 urology advice. Suprapubic catheter may be needed.
- 4. Allow bladder to empty, record volume drained, and send urine for microscopy, culture, and sensitivities.
- 5. If serum creatinine is:
 - less than 200 micromole/L, the patient can be discharged home.
 - greater than 200 micromole/s, observe patient for 2 hours. After initial drainage, if urine output is:
 - greater than 200 mL/hour after initial drainage, begin treatment for postobstructive diuresis.
 - less than 200 mL/hour after initial drainage, encourage oral fluids, discharge patient, and arrange repeat creatinine with general practitioner in 2 to 3 days.
- 6. If post-obstructive diuresis, arrange hospital admission and:
 - Replace intravenous (IV) fluid at a rate of 50% of the hourly urine output (e.g. if the patient is passing 240 mL/hour then IV fluids should run at 120 mL/hour).
 - Review rate of urine output and fluid replacement every two hours.
 - Use alternating one litre bags of sodium chloride 0.9% and glucose 4% sodium chloride 0.18%.
 - Seek acute urology advice.
- 7. Treat the underlying pathology if identified from history, examination, or investigation results.

Discharge and follow-up

- 1. Provide patient with a take-home supply of equipment, e.g. leg drainage bags and catheter fix attachments, as well as catheter care information.
- 2. Arrange community nursing services for catheter care and further provision of catheter supplies. Request a home visit the next day.
- 3. If serum creatinine was less than 200 micromole/L and urine output dropped to less than 200 mL/hour after initial drainage, arrange repeat creatinine with general practitioner in 2 to 3 days.

If reviewing patient at 2 to 3 days:

- Check that daily urine output is less than 3 L.
- Check urea and electrolytes.

If urine output, urea or electrolytes abnormal, seek acute urology advice.

- 4. If the patient has a complex urological problem or is recently postoperative, arrange non-acute urology review for catheter change or removal. Otherwise, arrange follow up with the patient's general practitioner for catheter change or removal:
 - Remove urinary catheters as soon as possible, although this will vary according to the circumstances.¹
 - If retention was precipitated by an acute event (e.g. constipation, medical illness, or surgery), remove catheter in 3 to 5 days. See Catheter Change or Trial of Void pathway.
 - If prior symptoms of benign prostatic hypertrophy, treat with an alpha-1blocker and arrange a trial of voic in 2 to 3 days.

Alpha-1-blockers

- Both doxazosin and erazosin are equally effective and it can be useful to switch to the other if one is ineffective or there are troublesome side-effects.
- Work by relaxing smooth muscle.
- Most common side-effects are dizziness and weakness.
- Postural hypotension is more likely if the patient is already on an antihypertensive, and this may need reducing.
- The dose needs to be titrated up over several weeks.
- In older adults and those with hypotension, start on a low dose.
- If prescribing doxazosin, start 2 mg at night for 7 days and increase to 4 mg at night, if required.
- If the catheter is removed prematurely, consider whether trial of void is appropriate or if catheter should be reinserted.
- Organise prophylactic antibiotic supply if indicated for future catheter change.

- If for trial of void, schedule for early in the morning so that reinsertion (if required) can be done during normal office hours. If the patient is on oxybutynin or solifenacin succinate, omit dose on the morning of the trial.
- 5. If in Christchurch emergency department, provide patient with a catheterisation pack. This contains:
 - Adult Community Referral Centre (ACRC) referral form
 - Catheter information booklet (You and Your Catheter)
 - 2 day bags
 - 4 night bags

Request

- Request acute urology advice if:
 - significant risk factors for urethral injury are present.
 - unsuccessful after second attempt at passing catheter.
 - · post-obstructive diuresis.
- If cauda equina syndrome is suspected, request urgent acute neurosurgery review.
- If patient is either recently postoperative or known to have complex urological problems, request non-acute urology review.
- For all other patients needing catheter change or removal, request general practitioner follow-up.
- If discharging a patient with a catheter in situ, request community nursing services for catheter care and provision of catheter supplies.



Constipation in Adults

See also Constipation in Oncology and Palliative Care.

Red flags

- Weight loss
- Abdominal mass
- Iron deficient anaemia
- Blood mixed with stool
- Palpable or visible rectal mass

Background

About constipation in adults

About constipation in adults

Stical Information Act Constipation is difficulty passing small hard stools or not passing stool of any consistency for 3 days or longer. The consistency of the stool rather than the frequency of defecation should be the focus

Most patients with idiopathic constipation are otherwise asymptomatic.

Assessment

- 1. History assess constipation and associated features:
 - Frequency and consistency of motions, presence of alternating diarrhoea. See Irritable Bowel Syndrome (IBS).
 - Difficulty defecating, e.g. straining, sense of incomplete evacuation, inability to pass stool despite urge
 - Duration of symptoms lifelong or recent change
 - Blood, lumps, pain, soiling of underwear
 - Constipating drugs

Constipating drugs

Constipating drugs commonly prescribed in hospital patients include:

- opioids, especially codeine.
- atypical antipsychotics, e.g. clozapine, olanzapine.
- tricyclic antidepressants.
- anticholinergics.
- antiemetics, e.g. ondansetron.
- calcium channel blockers.
- aluminium hydroxide.

History will suggest a cause in the vast majority of cases.

- 2. Consider whether primary constipation. This is most commonly caused by anismus de the offical Information A de the offical I (failure of normal relaxation of pelvic floor muscles during attempted defecation), and more rarely by slow colonic transit.
- 3. Consider secondary causes.

Secondary causes

- Tumour colorectal or pelvic mass
- Hypothyroid
- Depression
- Hypercalcaemia
- Eating disorder
- Pregnancy
- 4. Examine abdomen and rectum if anal tone is increased or pelvic floor muscles fail to relax when the patient is asked to simulate defecation, consider animsus.
- 5. Arrange investigations if indicated:
 - Plain abdominal X-rays are not automatically indicated for investigating constipation. If there is suspicion of significant faecal loading or an alternative diagnosis (e.g. bowel obstruction) an abdominal X-ray is indicated.
 - Blood tests are not usually necessary but will depend on differential diagnosis. Consider calcium, phosphate, and thyroid function tests if clinically indicated.
 - If red flags or colorectal symptoms suspicious for malignancy are present, consider further investigations, e.g. colonoscopy or CT colonography.

Red flags

- Weight loss
- Abdominal mass
- Iron deficient anaemia
- Blood mixed with stool

- Palpable or visible rectal mass
- If abdominal or rectal mass present, seek general surgery advice.

Management

Specialist assessment is not usually required, unless a specific underlying cause or a red flag is identified.

- 1. If animsus is suspected, consider requesting non-acute gastroenterology review for biomechanical feedback treatment.
- 2. Provide patient education resources.
- 3. Avoid giving the patient constipating drugs if possible.
- Advise simple measures to help relieve and prevent recurrence of idiopathic constipation.

Simple measures

- Maintain adequate dietary fibre. Warn the patient that this can worsen abdominal pain or bloating if constipation is moderate to severe.
- Avoid dehydration. Excess fluid will be ineffective.
- · Respond rapidly to urge to defaecate
- Go to the toilet at least once a day, even if no urge to pass stool.
- Exercise regularly.
- 5. Consider medications:
 - Initial trial of bulk-forming laxatives.

Bulk-forming laxatives

Increase faecal mass, which stimulates peristalsis.

Only suitable for mild constipation. Avoid in moderate to severe constipation as may cause abdominal pain and bloating.

Full effect may take some days to develop.

Valuable in patients with small hard stools, if increase in dietary fibre is not sufficient to relieve constipation.

Adequate fluid intake must be maintained to avoid intestinal obstruction. Avoid in pre-existing intestinal obstruction.

Common side effects include flatulence and abdominal distension.

Common preparations include:

- psyllium, e.g. Mucilax, Metamucil, Konsyl-D.
- sterculia, e.g. Normacol, Normacol Plus (also has stimulant action).
- If constipation is due to opioids, see Canterbury District Health Board Palliative Care Service Guidelines – Management of Constipation Associated with Opioid Use flow chart.
- If hard stool is filling the rectum, or oral treatment is ineffective, consider suppositories and/or enemas:
 - Glycerol suppositories
 - Bisacodyl suppositories
 - Micolette or Microlax enema
 - Phosphate enema should usually be avoided in the elderly or those with chronic kidney disease as there have been cases of phosphate nephropathy and acute kidney injury, some of which have been fatal. However, if non-phosphate enema products are not available, phosphate enema may be used with precautions, including ensuring adequate hydration and minimising the number of doses used.
- Other options include:
 - Bulk-forming laxatives
 - Stimulant laxatives

Stimulant laxatives

These laxatives:

- increase intestinal motility and often cause abdominal cramps.
- should be avoided in intestinal obstruction.

Common preparations include:

- bisacodyl, e.g. Lax-tabs, Dulcolax, Fleet.
- dantron (only in terminally ill patients due to potential carcinogenicity).
- senna, e.g. Laxsol, Coloxyl and senna, Senokot.
- glycerol suppositories.
- Osmotic laxatives

Osmotic laxatives

These:

- increase the amount of water in large bowel, either by drawing fluid from the body into the bowel or retaining the fluid the laxative was administered with.
- should be avoided in intestinal obstruction.

Common preparations include:

- oral lactulose, rectal sodium citrate (e.g. Micolette).
- second-line option oral macrogols (e.g. Molaxole). These are cheaper on prescription rather than over the counter.
- Stool softening agents

Stool-softening agents

Docusate sodium probably acts as both a stimulant and a softening agent.

They should be avoided in intestinal obstruction.

Combination products with additional stimulants often cause abdominal cramps.

Common preparations include docusate sodium, e.g. Coloxyl.

- 6. If the patient is pregnant, and dietary and lifestyle changes fail to control constipation, advise the patient to use moderate doses of poorly absorbed laxatives.
 - A bulk-forming laxative (e.g. psyllium husks) should be tried first.
 - An osmotic laxative (e.g. lactulose, Molaxole) can also be used.

Request

- Consider requesting non-acute gastroenterology review if animsus is suspected.
- Seek general surgery advice if rectal or abdominal mass present.

Information

For health professionals

Education

BMJ Learning – The Royal New Zealand College of General Practitioners

Modules [requires registration] – Constipation: A Guide to Diagnosis and Management

For patients



On HealthInfo

- Give your patient a HealthInfo card and encourage them to search using the keyword "constipation".
- HealthInfo Constipation in Adults

Printable Resources

- HealthInfo Fibre and Fluid for Healthy Bowels
- Patient Constipation
- Ministry of Health Constipation

Patient Medication Information

- My Medicines:
 - Bisacodyl
 - Docusate
 - Lactulose
 - Macrogol
 - Sennoside B

Search My Medicines for patient information leafle's for any medications not listed in this section.

Contact the HealthInfo team at info@healthinfo.org.nz if you have any resources that you would like us to consider for this section.



Constipation in Children

Background

About constipation in children

About constipation in children

- Constipation is the difficult, delayed, or distressing passage of stools. It is a common problem, occurring in up to 30% of children.
- Childhood functional constipation may present with:
 - 2 or fewer bowel motions per week
 - Large stools in the rectum palpable on abdominal examination
 - Retentive posturing and withholding behaviour
 - Painful defecation or hard bowel movements
 - Large diameter stools
 - Soiling
- The child may also be irritable, show malacse or lethargy, and have decreased appetite or early satiety, symptoms which often resolve after the passage of a large stool.
- Constipation can be a significant isk factor for urinary tract infections (UTIs), urinary frequency and urgency, and recurrent abdominal pain.
- It can be present despite a saily bowel motion where daily stool is reflective of overflow from a rectum tilled to capacity.
- Soiling is caused by soft stool leaking around the hard stool of constipation. It is often referred to as overflow or "sneaky poos".
- Encopresis occurs when a child is not constipated and is aware of passing stool but passes stools somewhere other than on the toilet or into a nappy.
- It is normal for babies aged younger than 1 year to vary greatly in the frequency and consistency of bowel motions:
 - Breastfed babies may defecate following each feed but some breastfed babies only defecate every 7 to 10 days.
 - Formula-fed babies will usually defecate at least every 2 to 3 days.
 - Babies can appear distressed for some time prior to a bowel motion. Straining, facial flushing, or crying for a short period before passing soft stool can be normal in infants and is not constipation.
- Children aged older than 1 year usually defecate at least every 2 days.

- Constipation in childhood is almost always functional.
- Organic problems are rare and are usually only sought if standard treatment fails or in the setting of obvious abnormality, e.g. anorectal anomaly, neurological abnormality.
 Medical causes could include Hirschsprung's disease, slow colonic transit, coeliac disease, hypothyroidism, and hypercalcaemia.

Assessment

1. Take a history.

History

- Symptoms abdominal pain, distension, nausea, anorexia (loss of appetite), and presence of any urinary symptoms, secondary nocturnal enuresis, urinary urgency or frequency, urinary tract infections (UTIs), whether toilet trained or not
- Duration of problem
- Onset

Onset

- Neonatal constipation in a baby with history of delayed passage of meconium is suspicious for Hirschsprung's disease (HD).
- Onset after starting solid food containing gluten may suggest <u>coeliac disease</u>.
- History of fearful event, e.g. scared by toilet flushing, at time of toilet training may lead to retentive behaviour resulting in constipation.
- If following a significant event or clear precipitating factor (e.g. gastroenteritis, anal fissure, surgery requiring opioids), children may respond quicker to treatment and may not require such an extended course of maintenance laxatives.
- Stool pattern frequency, consistency, size of stools, any pain or bleeding See the Bristol Sool Chart. "Ribbon" stools may suggest anal stenosis.
- Stooling behaviour awareness of need to go, straining, withholding or toilet refusal, soiling
- Treatments already tried and duration
- Lifestyle factors range of foods eaten, dairy and fluid intake, physical activity
 - Dietary factors may include excessive cow's milk intake, but, unlike adults, lack of fibre is rarely an issue.
 - Formula-fed babies are more at risk of constipation than breastfed babies.
- Social factors toilet training, change in family dynamics or routine, especially starting school
- Medical history, including neonatal confirm newborn screen negative, passage of meconium (within 48 hours of birth)

Medications, especially iron supplements, antihistamines, ADHD drugs

Drugs can cause constipation

Drugs that can cause constipation in children include:

- Antacids containing aluminium or calcium
- Anticholinergics
- Antidepressants (tricyclics, selective serotonin reuptake inhibitors)
- Antihistamines (sedating)
- Antipsychotics (phenothiazines, clozapine, olanzapine, quetiapine)
- Atomoxetine
- Calcium supplements
- 5HT₃ antagonists, e.g. ondansetron
- Iron supplements
- Opioids, including codeine
- Proton pump inhibitors
- Sucralfate
- Vincristine
- Family history of coeliac disease, hypothyroidism, or Hirschsprung's disease
- Growth faltering or significant rectal bleeding

2. Examination:

- Measure weight and height.
- Palpate abdomen. Examination is often normal, but a palpable stool in the descending colon is suggestive of faecal impaction.
- <u>Inspect anus</u>, especially in infants. Rectal examination is not necessary in general practice.

Inspection of the anus

Check for:

- normal anatomy.
- anal fissure.
- anal skin tag (usually at 6 or 12 o'clock).
- infection.
- Check spine for deep cleft or tuft of hair and lower limb neurology.
- 3. Consider faecal impaction if:

Faecal impaction

- Occurs when there has been no adequate bowel movement for several days or weeks, and a large, compacted mass of faeces builds up in the rectum and/or colon which cannot be easily passed by the child.
- Symptoms include failing to pass a stool for several days, followed by a large often painful or distressing bowel motion. Between bowel movements children with faecal impaction often soil their underclothes.
- Child may have vomiting and severe pain.
 - palpable mass.
 - · soiling or loss of awareness.
 - abdominal pain and vomiting.
 - urinary symptoms, including retention and incontinence.
 - lack of result or increasing abdominal pain when using maintenance laxative therapy.
- 4. Ask the parents to complete a <u>bowel record chart</u>, even if they think their child is not constipated. Ask the child to tell the caregiver when they have done a poo before flushing the toilet. Also print out a copy of the <u>Bristor stool Chart</u> to go with the record chart.
- 5. Investigations are not necessary as diagnosis is made by history and examination.

Management

Practice point

Do not use laxatives alone

Always combine laxatives with general toilet training measures and support.

1. Provide education and arrange support to achieve patient compliance.

Education

- Reassure the parents and child that there is no organic problem.
- Explain the reasons for constipation in children.

Constipation in children

Childhood constipation is common.

There are many reasons a toddler might have a hard stool and passing a hard stool is often painful.

Children don't want that pain and so try to hold on to the stool. This aggravates the problem as any delay in passing the stool only makes it harder, as the body absorbs more water from the stool.

Usually constipation occurs when this cycle happens:

- Provide <u>written information</u> or show an educational <u>video</u>.
- Explain the need to develop normal bowel habit.
 - Ensure the parents and child know from the start that treatment is likely to be needed for many months, or even years.
 - Develop a plan with the child and the family, including any support needed. This
 could include <u>child disability allowance</u> if significant constipation and the family is
 struggling to afford unfunded medication.
- Advise general measures consider using a continence tockit.
 - Adequate fluid intake

Adequate fluid intake

- Ensure the child has water at each mealtime and extra drinks when weather is hot.
- Reduce milk intake if excessive. For children aged older than 1 year, give no more than 500 mL spread throughout the day.

Normal fluid needs:

- Children aged 1 to 4 years need about 4 cups of fluid a day.
- Children aged 5 to 13 years need 5 to 6 cups of fluid a day.
- If the child is very active, they may need to have more fluid.
- Water is the best fluid.

See also HealthInfo – Fibre & Fluid for Children.

Adequate fibre

Adequate fibre intake

- Ensure the child has at least 3 servings of vegetables and at least 2 servings of fruit per day (best with peel left on), and 4 to 5 servings of grain foods per day. Do not use psyllium husk in children.
- See KidsHealth Constipation.

- Fruit juice containing sorbitol (e.g. prune, pear, or apple) or kiwifruit (e.g. KiwiCrush) This may be sufficient to soften the stool. Do not give fruit juice to infants aged younger than 1 year.
- Adequate exercise
- Regular toileting

Regular toileting

- Encourage sitting on the toilet, preferably after meals.
 - The child should sit for 5 minutes, twice a day.
 - After breakfast and dinner is often best.
- Make sure the child is comfortable on the toilet. They may need an inner seat.
- Get something for the child to rest their feet on to ensure their knees are higher than their hips.
- Encourage the child to lean forward and rest their elbows on their knees.
- Teach the child to push their stomach (abdomen) out when pushing.
- Consider a star or reward chart to monitor progress. Praise sitting on the toilet, rather than having clean underwear.

See printable patient information.

3. If constipated and soiling, the child is likely to be impacted. Treat <u>disimpaction</u> first before prescribing any maintenance laxatives.

Disimpaction

Disimpaction may be required initially for many children with severe constipation or impaction.

- Do not use lactulose if the child is impacted, as it will likely make abdominal pain worse.
- Initially, use <u>macrogol</u> 13.8 g sachet (this is the standard dose sachet, not the half-sachet 6.9 g dose, which is not funded).
 - Give disimpaction dose according to age.
 - Titrate dose up to effect.
- If there is no response to macrogol, consider <u>PicoPrep</u>, <u>Picosolax</u>, <u>or Dulcolax SP drops</u>.
- If severe impaction with pain or urinary retention, consider <u>rectal therapy</u> in conjunction with oral disimpaction therapy.
- Follow disimpaction phase with maintenance softening laxatives.
- 4. If the patient is symptomatic, has long-standing constipation or abdominal pain and is not soiling, start <u>maintenance laxatives</u> as well as general measures.

Maintenance laxatives

- Start with lactulose.
- If lactulose is unpalatable and affects compliance or 3 mL/kg/day is not working, start macrogol (lactose can be continued).
- If compliance is an issue, or lactulose and macrogol are ineffective, use <u>Dulcolax</u>
 <u>SP</u> drops note that this is not the same as Dulcolax tablets or suppositories, which contain bisacodyl as the active ingredient.
- All may cause abdominal discomfort.
- Can be unpredictable in their effect.
- Adjust doses depending on the result. Aim for 1 soft stool per day (minimum at least 3 soft stools per week with no pain and no soiling).

Length of use:

- Will need to be given for a prolonged period, usually at least 6 months, and sometimes for years to enable the rectum to regain tone and allow bowel retraining. Laxatives usually need to be given for at least as long as the problem has existed.
- Osmotic and lubricant laxatives can be safely used for years and do not cause dependence.
- Stimulant laxatives should be used when osmotic laxatives have been ineffective.
 Once control is regained, or disimpaction achieved, retry osmotic laxatives.
- The most common cause of treatmen failure is stopping the laxative too early.
- Do not stop laxatives suddenly. Wean slowly.
- Once the child has been symptom-free for at least 2 months (or longer, depending on the length of the constipation), consider gradually weaning off the laxative.
- If constipation returns, cestart previous effective laxative dose. Warn families in advance that this is common.
- See Constipation Therapies in Children for dosing regimens.
- 5. Treat anal fissures if present.

Anal fissures

- Start laxatives.
- Apply a barrier cream (e.g. <u>castor oil and zinc oxide</u> ointment) or higher-potency zinc cream (e.g. <u>Secura EPC</u>), or use a topical preparation containing a local anaesthetic (e.g. <u>Ultraproct</u>, <u>Proctosedyl</u>) for 2 to 3 days only.
- 6. Discuss school expectations.

School expectations

Encourage parents to discuss the issue with the child's teacher and to make a plan to manage issues at school. Consider requesting <u>continence services</u> from public health

nurses to help with this. Teachers can access an educational pathway on toileting through Leading Lights.

Schools may not change a child who has soiled, and may instead call the parents to do so. They may ask general practitioners to fill in a form for funding to support teacher aides to change a soiled child.

Advise parents to consider timing of disimpaction (e.g. weekends, school holidays), as the child may need to be in easy reach of a toilet.

7. Arrange follow-up.

Follow-up

- Plan regular face-to-face or phone review with the family to monitor progress and Information Act adjust medication as needed (maybe 1 to 2 weekly).
- Encourage compliance and persistence with treatments.
- The most frequent reasons for failure of treatment are:
 - not getting stool soft enough.
 - not getting enough laxative.
 - duration of treatment being too short.
 - not being used in conjunction with bowel retraining or toileting regime.
- Ensure dose is adequate.

Adequate laxative dose

E.g., a child aged:

- 2 years, weight 12 kg, is likely to need 25 to 36 mL lactulose daily.
- 4 years, weight 13 kg, is likely to need at least 1 sachet macrogol daily maintenance.
- Disimpaction doses:
 - start with at least 1 g/kg macrogol daily, and increase to achieve result.
 - start a child aged 8 years, weight 30 kg, with 3 (full) lax-sachets daily and increase to effect.
- Aim for "wet cement" or porridge-type stool.
- Do not stop laxatives suddenly. Wean slowly.
- Wean medication when the child has been regularly passing soft-formed stools for at least 2 months (or longer, depending on the duration of the constipation – often the same amount of time as the constipation has been present for).
- If constipation returns, restart previous effective laxative dose. Warn families in advance that this is common.

 Consider further support for the family from the practice nurse, Well Child provider, or through a <u>continence service</u>.

Continence service

Consider requesting continence assessment for:

- a child that is soiling and not improving rapidly after disimpaction.
- support to continue laxatives in the maintenance phase.
- help with managing constipation at school.
- 8. Request non-acute paediatric medical assessment if:
 - suspected underlying medical cause.
 - faecal impaction which has not responded to disimpaction treatments.
 - the child has been receiving appropriate doses of medication but treatment is not effective.

Request

- Request non-acute paediatric medical assessment if:
 - suspected underlying medical cause.
 - faecal impaction which has not responded to disimpaction treatments above.
 - the child has been receiving appropriate doses of medication but treatment is not effective.
- Consider requesting continence assessment for:
 - a child that is soiling and not improving rapidly after disimpaction.
 - support to continue laxatives in the maintenance phase.
 - help with managing constipation at school.

In your referral, include information on symptoms, duration of symptoms, and treatments trialled.

Information

For health professionals

Further information

NASPGHAN – <u>Evaluation and Treatment of Functional Constipation in Infants and</u> Children: Evidence-Based Recommendations

For patients



On HealthInfo

- Give your patient a HealthInfo card and encourage them to search using the keyword "constipation".
- HealthInfo:
 - Constipation in Babies
 - Constipation in Children

Printable Resources

- HealthInfo How to Sit on the Toilet
- KidsHealth:
 - Constipation
 - Laxatives
 - Soiling

Patient Support Information

Plunket

Videos

Primary Children's Hospital – Constipation in Children: Understanding and Treating This Common Problem

Search <u>My Mediches</u> for patient information leaflets for any medications not listed in this section.

Contact the HealthInfo team at <u>info@healthinfo.org.nz</u> if you have any resources that you would like us to consider for this section.