

CONSTIPATION

- Faecal Disimpaction
- Colonic Lavage (Age \geq 1 Year)
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- References

Acknowledgement

This guideline was developed by KidzFirst, South Auckland Health. Starship appreciates being able to include this guideline.

Faecal Disimpaction

Infrequent passage of stool for whatever reason often leads to constipation and faecal impaction with secondary problems of faecal soiling, anorexia, abdominal pain, behavioural problems and low self-esteem. The management of constipation involves:

1. Education and explanation.
2. High fibre diet and high fluid intake (consider dietician review during admission).
3. Retraining children to sit regularly on the toilet.
4. Laxative medications to soften the stool (e.g. lactulose) and increase stool expulsion (e.g. Senokot® - note: non-formulary at Auckland DHB. Suggest use docusate / senna combination).
5. Faecal disimpaction (e.g. colonic lavage or phosphate enema). Note the former should be used with caution under the age of 1 year and the latter is contraindicated under the age of 3 years.

Colonic Lavage (Age \geq 1 Year)

Poor response to outpatient therapy may necessitate an admission in selected cases for colonic washouts. Large volumes (5-10L) of a balanced electrolyte solution, **Klean-Prep™**, is given orally to 'dissolve' the faecal lump.

The majority of children will require a nasogastric tube to achieve the desired intake per hour. Involve the Play Therapists. Oral midazolam 0.5mg/kg to a maximum of 15mg may be required. Blood tests are not required routinely. Abdominal x-rays are at the discretion of the admitting consultant. All patients should be seen and assessed by a paediatric consultant prior to admission. That individual is responsible for outpatient follow up following discharge.

Once the child is admitted to the ward, a large nasogastric tube should be inserted and vital signs and weight recorded. Begin the nasogastric infusion at the lowest rate and increase by 100ml/hour until the desired rate is reached or symptoms develop. Most children need 10-40ml/kg/hr. Normal diet should continue if tolerated.

SUGGESTED FLOW RATES FOR KLEAN-PREP™			
Age (Years)	Weight (kg)	Initial (ml/hr)	Maximum (ml/hr)
1-5	10-20	100	500
6-9	20-30	200	800
9-12	30-40	300	1000
Over 12	40+	400	1200

If symptoms develop (usually nausea &/or vomiting), reduce the flow rate to the previous rate at which the child was asymptomatic. Metoclopramide may be given to reduce nausea and reduce transit time. Discontinue at 8pm at night to allow rest as 'catharsis' may continue late into the evening. Restart at 6am.

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Important: Success of treatment is judged by a clear effluent (SOMEONE NEEDS TO LOOK IN THE PAN!). The commonest reason for failure of treatment is insufficient volume of Klean-Prep™. Abdominal x-ray and rectal examination at the end of treatment are unnecessary (frequently uninterpretable) if clear effluent is achieved.

Phosphate enemas (Age >3 yrs)

Phosphate enemas can be used in the outpatient or Emergency Care setting to disimpact the rectum. They should not be administered by parents and are contra-indicated in children under the age of three. If there is no result they should not be repeated on the same day. Dosage: 30-60mls. One to three enemas may be required, ideally 48 hours apart. Refer to the Paediatric Nursing Service.

Discharge and Follow up

A discharge plan should be discussed with the patient's primary paediatrician. Most patients will be discharged on lactulose (1-3ml/kg/day in two divided doses) and some paediatricians will also use Senokot 1 tablet for preschoolers, 2 tablets for school aged children daily.

Each patient should have a follow-up appointment within a month - three months is too long if 'the wheels are falling off'.

References

1. Abi-Hanna A, Lake AM. Constipation and Encopresis in Childhood. Paeds in Review 1998; 19:23-31.
2. Ingebo KB, Heyman MB. Polyethylene Glycol-Electrolyte Solution for Intestinal Clearance in Children with Refractory Encopresis. AJDC 1988;142:340-342.
3. Craig JC, Hodson EM, Martin HCO. Case Report – Phosphate enema poisoning in children. Med J Aust 1994;160:347-351.