

Laxatives

The aim of laxative therapy is to achieve comfortable defecation, rather than any particular frequency of evacuation. Although most laxatives are not very palatable, oral laxatives should be used whenever possible. The choice of laxative depends on the nature of the stools, the cause of the constipation, and acceptability to the child. Laxatives can be subdivided into three groups:

- Predominantly softening
- Predominantly peristalsis stimulating
- Combination of the two

Laxatives may be used to encourage regular bowel motions. They should be used in conjunction with regular toileting. Oral medications are always the first choice. However, in some children rectal medication may be required but in most circumstances parents should not be required to administer rectal treatment to young children. It is important that the doctor prescribes and monitors the regime. Laxatives have many functions, most commonly stool softeners and stimulants.

PCAA STRONGLY RECOMMENDS THAT THE USE OF LAXATIVES BE UNDER THE SUPERVISION AND DIRECTION OF YOUR CLINICIAN.

Washouts.

Occasionally children with STC will have such a build-up that the symptoms of bloating, urinary urgency and overflow soiling become unacceptable and the colon needs to be "washed out". Washout solutions used vary and are prescribed by your doctor. Washouts are administered either via a naso-gastric tube inserted through the nose and into the stomach or via an appendicostomy (a small hole through the appendix which has been surgically brought to the skin) or Chait button (this is a small indwelling catheter that has a trapdoor lid, and passes down the appendix from the skin into the large bowel).

Occasionally rectal washouts are used. The type of washout solution needed and the degree of build-up will determine whether the child needs to be hospitalized for supervision of the treatment, or whether it can be administered at home. A solution is injected through the catheter into the bowel (as pictured right). The fluid irrigates and flushes out faeces in the bowel through the anus in about 20 minutes.

Drug Safety.

Regarding stool softeners, the patient's most significant side effect is diarrhoea related to excessive therapeutic effect. Undigested sugars commonly cause abdominal cramping, flatulence and may cause distension. Such medications (lactulose, sorbitol) are less effective than polyethylene glycol (PEG 3350, Movicol) and use is declining. Paraffin oil used long term may slightly reduce serum levels of beta-carotene, but has no effect on retinol or tocopherol levels. Paraffin oil should be avoided in patients at risk of aspiration (infants under 1 year and children with neurodevelopmental delay) due to the risk of lipid pneumonia. PEG 3350 is safer in this context and has no known long term side effects. Stimulant laxatives are associated with melanosis coli. This is a cosmetic change to the mucosal surface of the colon due to increased apoptosis of epithelial cells. Essentially, there is little or no evidence that chronic treatment with stimulant laxatives currently available in Australia (senna, bisacodyl, sodium picosulfate etc) causes any long term adverse effects. Findings of a recent review of stimulant laxatives are on the next page.

Safety of stimulant laxatives

1. Stimulant laxatives cause structural damage to surface epithelial cells (melanosis coli)
2. This is of uncertain functional significance
3. There is no convincing evidence of impairment of enteric nerves or intestinal smooth muscle
4. There is no reliable data to link chronic use of stimulant laxatives to cancer
5. The risks of laxatives have been over-emphasised
6. This has minimised their rational use by physicians
7. Stimulant laxatives may be used chronically when patients fail to respond adequately to softeners alone
8. These can be combined with softeners in sufficient amounts to soften the stool
9. The dose of such agents should be titrated to effect
10. Bisacodyl may be used if anthraquinone laxatives are unsatisfactory

Pre-emptive Education of Patients and Families

To maintain compliance and prevent undermining of treatment regimen by well-meaning family, friends or by other health professionals, it is important to reassure families that laxative treatment is safe. Parents should be educated pre-emptively on the safety of laxative medications. A common reason for treatment failure is non-compliance by parents (withholding or prematurely ceasing laxatives) due to concerns about potential harmful effects. This should be explicitly addressed at the outset and parents educated against false information about the harmfulness of laxative medication.

Useful statements in educating families include:

1. The medication is not habit forming
2. The bowel will not become "dependent" or "lazy" from medication, but may do so from lack of adequate treatment
3. There are no long term side effects
4. These are common old wives' tales you will hear
5. Recently world experts in constipation reviewed the science behind these old wives' tales and found them not to be true
6. Many people you meet may not be aware of this recent information
7. If you have concerns about the medication, discuss them with your doctor before changing the treatment plan

What about fibre?

Regarding the role of fibre in paediatric constipation, there is little evidence that it assists once faecal impaction or megarectum is present. If the stool calibre is narrow and the patient's problem is small hard stools, a bulking agent may be helpful. In the majority of children, stool calibre is wide and impaction and/or encopresis are present. The addition of pharmacological doses of fibre frequently exacerbates this condition. Fibre as part of a healthy diet containing good amounts of fruit, vegetables and wholemeal grains as well as adequate fluid intake is recommended. However, pharmacological preparations containing psyllium or other fibre supplements are not recommended for functional faecal retention.

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