

APPENDIX 2. PHARMACOLOGIC TREATMENT OF CONSTIPATION

Agent	Maximum Dose	Comments	Level of Evidence
Bulking Agents			
Psyllium (Metamucil®, Prodiem®)	Child: 7.5-15 g/d PO with at least 4 glasses water Adult: 15-60 g/d PO with at least 8 glasses of water	May cause gas & bloating Preferred in pregnancy Works over days	Insufficient data to make a recommendation about its efficacy
Stool Softeners			
Docusate sodium (Colace®) Docusate calcium (Surfak®)	Child: 5mg/kg/day in 1-4 divided doses < age 3: 10-40mg/day 3-6 years: 20-60mg/day 6-12 years: 40-150mg/day Adult: 50-400 mg/day in 1-4 divided doses	Do not induce defecation Preferred in pregnancy Work over days May be inferior to psyllium for improved stool frequency	Insufficient data to make a recommendation about its efficacy. No evidence for long-term use.
Lubricants			
Mineral Oil Lansoöl Jelly®	Child: <i>Disimpaction:</i> 15–30 ml per year of age, (1-4 tsp) per day, max: 240 ml <i>Chronic constipation:</i> 1–3 mL/kg/day q HS Adult: 15-45 mL PO as 1-time dose or qd or as retention enemas Child: 6–12 years: 5 –15 mL (1 to 3 teaspoonfuls) daily. ≥12 years and Adult: 15–45 mL (1–3 tbsp daily). Single dose at bedtime recommended.	Not recommended for infants <12 months or those who cannot protect airway Give 2–3 hours after evening meal to reduce possible vitamin malabsorption	
Stimulant Laxatives			
Senna (Senokot®, ExLax®)	Child: 2-6 years: 2.5-3.75 ml syrup qhs 6-12 years: 5-7.5 ml syrup qhs >12 years: 10-15 ml syrup qhs use for up to 2 weeks before moving to maintenance Adult: 2-4 tabs OD-TID (if OD, give at HS) 0.12-0.25 g/d PO	Child: Not recommended Adult: Not recommended for long-term use May cause cramping, abdominal pain and diarrhea Work within hours (overnight) Prudent to limit use to constipation that is refractory to other laxatives. Long-term use may be associated with tachyphylaxis and dependency leading to increasing dosage. Most appropriate for opioid-induced constipation†	Insufficient data to make a recommendation about its efficacy. No evidence for long-term use.
Bisacodyl (Dulcolax®, Correctol®, Carter's Pills®)	Child: 3-12 years: 5-10 mg po tablet >12 years: 5-15 mg/day po give qhs for 3 nights Adult: 5-15 mg HS/OD10 mg supplement OD		
Osmotic Laxatives			
Glycerin suppositories (Glycerin)	Child: 2-6 years ½ –1 suppository daily Adult: single daily dose	No side effects	

Polyethylene glycol 3350 (without electrolytes) (PEG 3350)	Child <i>Disimpaction:</i> 1.5g/kg for 3 days <i>Maintenance:</i> <age 6: 3g/day >age 6: 6g/day	Flavourless and odourless osmotic laxative in powder form. It is absorbed only in trace amounts from the GI tract and there is no risk of salt absorption. The crystals are mixed in a cup of fluid that the patient drinks.	Level I
Polyethylene glycol 3350 (with electrolytes) (GoLyteLyte®, PegLyte®)	Adult <i>Disimpaction:</i> 17 g/day <i>Maintenance:</i> 240–480 mL/day orally	Improves stool frequency & consistency Used for disimpaction. For chronic constipation or renal failure, solution without electrolytes is preferred. No safety or efficacy data available for use in infants.	
Magnesium hydroxide (Milk of Magnesia®)	Child: 400 mg/5 ml concentration <2 years: 0.5ml/kg/dose 2-5 years: 5-15 ml/day qhs 6-11 years: 15-30 ml/day qhs >12 years: 30-60 ml/day qhs Adult: 30–60 mL OD	For immediate relief Works within hours In patients with renal failure, may cause magnesium toxicity	Insufficient data to make a recommendation about its efficacy
Phosphate (Fleet® oral & enema)	Adult: Twice daily for 3 days or more	Avoid in children For immediate relief Oral: works within approx. 1 hour Risk of hyperphosphatemia	
Lactulose (Chronulac®, generics)	Child: 1–3 mL/kg/day in divided doses Adult: 15-60 mL OD	Works in 24-48 hours; preferred in pregnancy Flatulence and abdominal distension may limit tolerance	Level I
Prokinetics			
Tegaserod (Zelnorm®)	Adult: 2–6 mg BID	In chronic constipation, improves frequency of complete, spontaneous bowel movements, straining, stool frequency and stool consistency (Info point 18)	Level I

Sources:

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† Lipman A, Jackson K, Tyler LS (Eds). *Evidence Based Symptom Control in Palliative Care: Systematic Reviews and Validated Clinical Practice Guidelines for 15 Common Problems in Patients with Life Limiting Disease*. Binghamton, NY: Howarth Press Inc; 2000.

