

# RGH Pharmacy E-Bulletin

Volume 39 (12): October 11, 2010

A joint initiative of the Patient Services Section and the Drug and Therapeutics Information Service of the Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia. The RGH Pharmacy E-Bulletin is distributed in electronic format on a weekly basis, and aims to present concise, factual information on issues of current interest in therapeutics, drug safety and cost-effective use of medications.

Editor: Assoc. Prof. Chris Alderman, University of South Australia – Director of Pharmacy, RGH

© Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia 5041

## Constipation (part two)

A previous E-Bulletin (39-6) addressed general aspects of constipation management. Further information about specific therapeutic interventions is outlined here.

*Bulk forming agents* (which may also be used to absorb fluid from loose stool in chronic diarrhoea):

- bran
- ispaghula husk: Fybogel®
- psyllium husk: Mucilax®
- psyllium & ispaghula husk: Metamucil®
- sterculia gum: Normacol®

*Osmotic laxatives* are hyperosmotic agents which draw water into the intestinal lumen, softening stool.

- sorbitol syrup
- lactulose syrup – now subsidized through the PBS for palliative care patients.
- glycerin (suppositories only) also a lubricant, used primarily in paediatrics and in paraplegia
- Polyethylene glycols or macrogols; macrogol 3350 with electrolytes (Movicol®) is now PBS for palliative care/patients with malignancy/paraplegic patients. Up to 16 sachets can be given for faecal impaction.
- ColonLYTELY® and other colonic lavage bowel preparations are a similar formula, with rapid onset.
- Saline laxatives include magnesium sulfate (Epsom Salts), and sodium phosphates enemas (not ideal in elderly because of electrolyte disturbances), and Microlax® enemas which also contain sorbitol.

Stool softeners are anionic surfactants, otherwise known as detergents, which allow water into the stool.

- docusate (Coloxyl®) may be useful alone when the combination product with senna causes cramping
- poloxalkol (Coloxyl® drops)
- Liquid paraffin (emulsion is preferred because of palatability) is a lubricant stool softener, and more commonly used in children than adults.

Onset of action for the agents described above is usually within 1-2 days and full effect is observed within 2-3 days. For more rapid effect, rectal preparations and/or saline laxatives can be used.

Stimulant laxatives are reserved for severe constipation unresponsive to bulking agents or osmotic laxatives. Onset of action of stimulant laxatives is usually within 12 hours, and short term use is preferred. It is not true that stimulant laxatives alter bowel tone or nerve sensation, but abdominal cramping may be a side effect.

- senna (Senokot®) tablets and granules, often formulated with docusate as Coloxyl & Senna® or may be combined with dried fruits (Nulax®)
- bisacodyl (Bisalax®, Dulcolax®) as tablets and suppositories
- sodium picosulfate (Dulcolax® drops) is combined with magnesium salts in Picolax® bowel preparations

Opioid antagonists such as methylnaltrexone, which is selective for the constipation-causing  $\mu$  receptors in the GI tract, and does not cross the blood-brain barrier, have usefulness in resolving refractory opioid-related constipation, but should not replace the use of regular prophylactic laxatives. A product in which naloxone is combined in a range of fixed-dose combinations with oxycodone has recently been marketed for pain management and treatment/prophylaxis of opioid-induced constipation, but the utility of this approach in clinical practice remains unclear at this stage.

This E-Bulletin is based on work by Jenny Casanova, Senior Clinical Pharmacist, RGH

**FOR FURTHER INFORMATION CONTACT THE PHARMACY DEPARTMENT ON 82751763 or email: [chris.alderman@health.sa.gov.au](mailto:chris.alderman@health.sa.gov.au)**  
Information in this E-Bulletin is derived from critical analysis of available evidence – individual clinical circumstances should be considered when making treatment decisions. You are welcome to forward this E-bulletin by email to others you might feel would be interested, or to print the E-Bulletin for wider distribution. Reproduction of this material is permissible for purposes of individual study or research.