

Pegicol™ – Oral treatment for chronic constipation and faecal impaction in children

Compiled by Amayeza Drug Information Centre

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Approved indication

Pegicol™ is indicated for the treatment of chronic constipation with or without faecal impaction[#] in children 2 to 11 years of age. It is also used to prevent the recurrence of faecal impaction in children.

[#] Faecal impaction is defined as refractory constipation with faecal loading of the rectum and/or colon confirmed by physiological or radiological examination of the bowel or rectum.

Mode of action

Pegicol™ is an iso-osmotic laxative and contains polyethylene glycol (PEG) 3350 and electrolytes. Polyethylene glycol exerts its laxative effect by virtue of its osmotic effect in the gut. Water is kept in the lumen, which softens stools and promotes bowel movement. The electrolytes contained in the formulation ensure that there is virtually no net gain or net loss of sodium, potassium or water.

Polyethylene glycol passes unchanged through the gut. It is virtually unabsorbed from the gastrointestinal tract and has no known pharmacological activity.

Dosage

• Chronic constipation and faecal impaction

Initial dose:

Children 2-6 years: One sachet daily

Children 7-11 years: Two sachets daily

The dose should be adjusted up or down, as required, to produce regular soft stools. The maximum dose should not normally exceed four sachets a day.

• Faecal impaction

The treatment course for faecal impaction is up to seven days as follows:

The number of sachets per day should be taken in divided doses, all consumed within a 12-hour period. The dosage regimen should be stopped once disimpaction has occurred i.e. the passage of a large volume of stools.

Age (years)	Number of Pegicol™ sachets per day						
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
2-4	2	4	4	6	6	8	8
5-11	4	6	8	10	12	12	12

After disimpaction, the child should be placed on an appropriate bowel management programme to prevent re-impaction.

Evidence of efficacy

There is a paucity of controlled clinical trials in paediatrics in general, and constipation in children, in particular.

- The laxative action of Pegicol™ has a time course, which varies according to the severity of the constipation being treated. Pegicol™ has been shown to be safe and effective in the treatment of constipation in children.
- Pegicol™ has been shown to be significantly more effective than lactulose both in treating constipation and as maintenance therapy in preventing the recurrence of faecal impaction.

Precautions

o General

Pegicol™ is contraindicated in patients with

- Intestinal perforation or obstruction due to structural or functional disorder of the gut wall
- Ileus
- Gastric retention
- Peptic ulceration
- Severe inflammatory disorders of the intestinal tract including Crohn's disease, ulcerative colitis and toxic megacolon

Pegicol is not recommended for use in children under two years of age.

It is not recommended for use in the presence of abdominal pain, nausea or vomiting.

o Pregnancy & lactation

Pegicol™ is indicated for use in children 2 to 11 years of age. Safety in

pregnancy and lactation has not been established.

Major adverse effects

Very common side effects include abdominal pain, nausea, diarrhoea or loose stools and vomiting. Major adverse effects are rare but allergic reactions have been reported.

Drug interactions

None

Cost: Single exit price (EXCL VAT)

Pegicol™ sachets (20): R75.00

Patient information

Each sachet should be dissolved in about 60 ml of water (quarter of a glass).

Twelve sachets can be made up in advance in up to 750 ml water and kept covered and refrigerated for up to 24 hours. The preparation is sugar-free.

The solution is lemon-lime flavoured but fruit squash can be added according to taste.

For faecal impaction, spread the sachets evenly through the day – but take the whole dose within 12 hours.

Conclusion

Pegicol™ is safe and highly effective in the management of childhood constipation. It allows a single, orally administered laxative to be used for disimpaction, without the need for invasive intervention.

References:

1. Pegicol Package Insert.
2. Candy DCA, Edwards D, Geraint M. Treatment of faecal impaction with polyethylene glycol plus electrolytes (PEG + E) followed by a double-blind comparison of PEG plus E versus lactulose as maintenance therapy. *J Pediatr Gastroenterol & Nutr* 2006;43:65-70.