

POLYETHYLENE GLYCOL WITH ELECTROLYTES

Pegovag

FOR GASTROINTESTINAL LAVAGE

ORAL SOLUTION



Lavages the
Obstruction

La Renon

BACKGROUND:

Adequate bowel cleansing is essential for successful endoscopic examinations as well as colonic surgeries.¹

Colonoscopy is a minimally invasive procedure and is currently the standard method to assess colonic mucosa.¹

It is typically ordered to exclude or identify early malignant diseases in patients with warning symptoms.¹

It has been widely used in patients with intestinal disorders to diagnose or treat colon diseases, as well as for other interventions.¹

Several purgatives are used in the clinical practice; one widely used is the polyethylene glycol (PEG) supplemented with electrolytes. It introduces an osmotic flow of fluids to the GI tract, drastically altering the normal colonic environment.¹

The ingested PEG electrolyte solution and the increased volume of fluids flushes out the luminal bacteria, introduces oxygen into the normally anaerobic colonic ecosystem and reduces the nutrition supply for the intestinal bacteria.¹

WHY PEGOVAG?

PEG-ELS is an effective alternative therapy in the treatment of chronic constipation with the proper dosage probably between 8 and 16 oz per day.²

According into account the safety concerns and reliability of laboratory, PEG-ELS is relatively better than NaPs and are recommended as the first choice for bowel preparation.³

Orthograde lavage using PEG-ELS is preferred for preparation for endoscopic and surgical procedures and this method is acceptable for barium enema X-ray if adjunctive agents such as bisacodyl are used.⁴

Absorption of PEG 4000 from the human gastrointestinal tract is minimal and it is unlikely to produce toxicity at its ordinary usual dosage for colonoscopy preparation.⁵

Intestinal lavage with polyethylene glycol and electrolyte solution is a safe and effective method, it is convenient for the patient and does not cause marked side effects.⁶

CLINICAL EVIDENCE :

"Polyethylene Glycol Electrolyte Lavage Solution versus Colonic Hydrotherapy for Bowel Preparation before Colonoscopy: A Single Center, Randomized, and Controlled Study."⁷

Aim:

To compare the effectiveness and safety of polyethylene glycol electrolyte lavage (PEG - EL) solution and colonic hydrotherapy(CHT) for bowel preparation before colonoscopy.

Method:

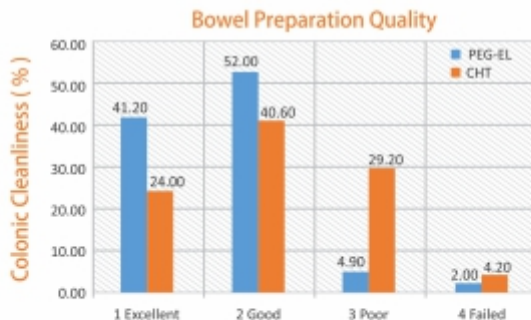
This study is a single-center, single blinded, prospective, randomized, and controlled trial. A total of 206 eligible patients were randomly assigned to the PEG-EL (n = 102) or CHT (n = 104) groups. Primary outcome measures included colonic cleanliness and adverse effects. Secondary outcome measures were patient satisfaction and preference, colonoscopic findings, ileocecal arrival rate, examiner satisfaction, and cecal intubation time.

Result:

PEG-EL group was associated with significantly better colonic cleanliness than CHT group. Abdominal distension and abdominal cramps were significantly more frequent in patients using the CHT preparation compared to patients using the PEG-EL preparation (for abdominal distension, CHT versus PEG-EL, 38.3% versus 2.0%; for abdominal cramps, CHT versus PEG-EL, 4.3% versus 0%). Adverse effects were significantly more frequent in the CHT preparation group compared to the PEG-EL group (CHT versus PEG-EL, 40.4% versus 4.9%).

Conclusion:

PEG-EL resulted in better colonic cleanliness, fewer adverse effects, and higher examiner satisfaction. Efficacy indices, such as mean quality scores for bowel cleansing and examiner satisfaction, were found to be significantly superior in the PEG-EL group compared to the CHT group.



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INDICATIONS:

PEG solution is used to induce bowel cleansing prior to gastrointestinal examination or catharsis following toxic ingestion. It is also useful in chronic constipation when used chronically.

DESCRIPTION:

PEG solution is a mixture of PEG and several electrolytes. PEG is an inert, nontoxic, water-soluble polymer that doesn't undergo either tissue or bacterial degradation.

PHARMACOLOGY:

PEG solution is a laxative that is used primarily for bowel cleansing prior to gastrointestinal examination. PEG solution induces catharsis by strong electrolyte and osmotic effects. The mechanism of action is local by drawing water into the gut. Absorption is negligible with little to no systemic effects.

CONTRAINDICATIONS AND PRECAUTIONS:

- PEG solution is contraindicated in gastrointestinal obstruction, gastric retention, bowel perforation, toxic colitis, and megacolon.
- Use with caution in ulcerative colitis.
- Pregnancy category C.
- If large amounts of PEG solution are used, food or medications should not be administered for one hour prior to PEG solution as they will not be absorbed.

References :

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