

the use of low volume polyethylene glycol (PEG) based solution combined with ascorbic acid is associated with a higher rate of adenoma detection compared to magnesium citrate. Methods: We performed a retrospective comparative analysis of the efficacy of low volume 2-L PEG based solution combined with ascorbic acid (administered between August and November 2012) versus 0.6-L magnesium citrate (administered between August and November 2011). Patients in both groups received a standard regimen of a stimulant laxative (Bisacodyl) and were given the same instructions. Efficacy referred to cecal intubation, polyp and adenoma, including right colonic polyp, detection rates. Right sided colon was defined as cecum, ascending colon and hepatic flexure. All procedures were performed by a single endoscopist. The Fisher's exact test was used to analyze the results. A P value < 0.05 was considered to be statistically significant. Results: A total of 181 patients were included in this study. 87 patients received the low volume PEG based regimen and 94 received the magnesium citrate regimen. The median age was the same (60 y) for both groups. Female patients accounted for the majority of patients in the two groups, 63% in the PEG group and 71% in the magnesium citrate group. The rates of cecal intubation were similar; 100% in the PEG group, 98.9% in the magnesium citrate group, P = 1.00. There were no differences in the detection rates of overall polyps (52.9% vs. 50%, P=0.07), histologically proven adenoma (39.1% vs. 36.1%, P = 0.76), and right sided adenoma (19.5% vs. 11.1% P=0.16) for the PEG and magnesium citrate groups respectively. Conclusion: Our study demonstrated no difference in adenoma detection rates between the low volume PEG based solution combined with ascorbic acid and the magnesium citrate bowel preparation methods.

Tu1368

A Randomized Prospective Trial Comparing Different Regimens of Polyethylene Glycol-Based Lavage and Sodium Picosulphate With Magnesium Citrate in the Preparation of Patients for Colonoscopy

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Background/Aims: Adequate bowel cleansing is essential for a high-quality, effective, and safe colonoscopy. There are rare reports that compare directly conventional polyethylene glycol (PEG) solution and sodium picosulphate with magnesium citrate (SPMC) for bowel preparation. The aim of this study is to compare the efficacy, safety, and tolerability of different regimens of SPMC and PEG solution. Methods: A total of 200 outpatients undergoing elective colonoscopy were randomized into four groups with endoscopist was blinded to the regimen. The patients underwent strict diet restriction for 3 days before the procedure. Group A: PEG 4L at same morning on the day of the colonoscopy. Group B: split doses of PEG 4L. Group C: split doses of 2 sachets of SPMC. Group D: split doses of 3 sachets of SPMC. Results: The total Ottawa scale score is most lowest in the 3 sachets of SPMC group and most highest in the 2 sachets of SPMC group. But there was no significant difference between groups. SPMC groups showed superior palatability and tolerability compared with PEG groups. SPMC groups showed minor electrolyte imbalances and hyperosmolarity, but there were no significant adverse events. Conclusion: SPMC (both 2 sachets and 3 sachets) is as effective as high-volume PEG-electrolyte solution but has superior tolerance. It has fewer adverse events and is preferred by patients.

Tu1369

Low-Volume Polyethylene Glycol (PEG) Plus Ascorbic Acid Versus Standard PEG Solution for Bowel Cleansing for Colonoscopy - a Randomized Controlled Study

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Background: Adequate bowel preparation is essential for an accurate assessment of the entire colon during colonoscopy. Polyethylene glycol (PEG) has been widely used for its high effectiveness for bowel cleansing but generally hardly tolerated that may contribute to poor patient compliance. Therefore, this study was designed to compare the 2-L PEG combined with ascorbic acid (PEG + Asc) with a standard 4-L PEG preparation in the efficacy, safety, and patient satisfaction of bowel cleansing. Methods: In a prospective, randomized, single-blind study, consenting adult participants undergoing elective colonoscopy receive 2-L PEG + Asc or 4-L PEG. All colonoscopies were scheduled in the

morning and preparations were taken as split doses the evening before and early in the morning on the day. Efficacy of bowel cleansing was recorded on a five-point scale in three different segments and a four-point overall grading. Patients' views on the preparations were assessed using a questionnaire. Results: Overall, 132 patients received 2-L PEG + Asc and 119 patients received 4-L PEG. Successful bowel cleansing was achieved in 97.7% in the 2-L PEG + Asc group compared to 98.3% in the 4-L PEG group (statistically not significant). Patient compliance, acceptability, and satisfaction were better for the 2-L PEG + Asc group than for the 4-L PEG (P=0.005, 0.001, and 0.001, respectively). In addition, overall side effects were lesser in 2-L PEG + Asc group (P=0.048). However, there was no significant difference in the patient rating of taste between two groups. Conclusion: Low-volume PEG + Asc is equally efficacious in bowel cleansing compared to standard 4-L PEG preparation, with the advantage of better safety and patient tolerability.

Tu1370

Bowel Preparation Before Colonoscopy With the Minimally Effective Dose of NaP

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Background: Oral sodium phosphate (NaP), which draws water into the bowel lumen and stimulates peristalsis and evacuation, is used for bowel preparation before colonoscopy. Reduction of NaP dose is desired because of potential adverse events including electrolyte abnormalities and acute phosphate nephropathy. The aim of this study was to determine whether NaP 30 g in combination with sodium picosulfate was useful for bowel preparation. Methods: Forty-three patients requiring screening colonoscopy were studied. Patients with hypertension over 65 years of age, renal failure, or congestive heart failure were excluded. Each patient was randomly allocated to receive either NaP 30 g (30 tablets) plus sodium picosulfate (0.75%, 10 ml), or NaP 50 g (50 tablets). NaP was administered at a rate of 3 tablets (NaP 3 g) or 5 tablets (NaP 5 g) every 15 minutes with 200 mL of water, beginning 5 hours before colonoscopy. Sodium picosulfate was taken with 200 mL of water in the evening before the procedure. The effectiveness of large-bowel cleansing was graded using the Ottawa scale by a single endoscopist who was blind to the dose of NaP. The time for completion of bowel preparation was defined as the time until clear stools were noted after NaP intake. Both groups were compared for effectiveness of large-bowel cleansing, time for completion of bowel preparation, and acceptability of the preparation. Differences with p values of less than 0.05 were considered statistically significant. Results: Twenty-three patients received NaP 30 g plus sodium picosulfate and twenty patients NaP 50 g. The Ottawa scale grade for NaP 30 g plus sodium picosulfate and NaP 50 g was 5.769 and 5.889 respectively. The mean time for completion of bowel preparation with NaP 30 g plus sodium picosulfate and NaP 50 g was 160.77 minutes and 185.00 minutes, respectively. There were no significant differences in effectiveness of large-bowel cleansing (p=0.758, Mann-Whitney U test) and time for completion of bowel preparation (p=0.309, Student's t-test). Acceptability of bowel preparation with NaP 30 g plus sodium picosulfate and NaP 50 g was 83.3% and 80.0%, respectively. There was no significant difference in acceptability of the preparation (p=0.886, Mann-Whitney U test). No adverse event occurred in any of the two groups. Conclusion: Oral NaP 30 g in combination with sodium picosulfate showed similar efficacy to that of oral NaP 50 g, and was acceptable to more than 80% of patients. It can be useful for bowel preparation before colonoscopy.

Tu1371

Evaluation of Gastric Volume and Gastric Emptying by Ultrasonography During and After Bowel Preparation by Sodium Phosphate Tablets Before Sedation by Propofol

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New bowel preparations have been developed to avoid the intake of 4 liters of PEG. Split bowel preparation the night before and the morning of the procedure improves the quality of the bowel preparation. Sodium phosphate (NaP) bowel preparation requires taking 20 tablets the evening before colonoscopy and 12 tablets the morning of the exam. This morning dose needs the ingestion of at least 750ml of clear fluids that is the reason why we have checked the possibility of general anaesthesia by propofol in the next 2 hours (American guidelines). The aim of our prospective study was to evaluate gastric emptying by ultrasonography during and after the second sequence of this bowel preparation in order to define the gastric volume and gastric emptying before general anaesthesia. Patients And Methods: This prospective study was referenced NCT01398098 (www.trial.gov) and performed in the endoscopy department of a