

Efficacy of low residue enteral formula versus clear liquid diet during bowel preparation for colonoscopy: a randomised controlled pilot trial

ABSTRACT

Objectives: Conventional bowel preparation for colonoscopy confines patient to clear liquid diet the day before and such non-nutritive dietary regimen often caused discomfort and hunger. The purpose of this study is to determine the feasibility of feeding patient with low-residue, lactose-free semi-elemental enteral formula (PEPTAMEN®) compare to conventional clear liquid diet during bowel preparation before colonoscopy. **Methods:** This was a randomised, endoscopist-blinded study. Patients were randomised into two groups, those receiving oral PEPTAMEN® and mechanical bowel preparation (A) and those receiving clear liquid while undergoing mechanical bowel preparation (B). Documentation was made with regard to the type of bowel cleansing agents used, completeness of the colonoscopy, cleanliness quality score, and hunger score. **Results:** A total of 97 patients were included in the study, A=48 and B=49. Eight patients, who were not compliant to the bowel-cleansing agent or had an incomplete colonoscopic examination, were excluded from the study. In terms of the overall cleanliness score, no statistical significant difference was seen ($p=0.25$) between the two groups, A (fair or poor 37.5%, good or excellent 62.5%) and B (fair or poor 49%, good or excellent 51%) whereas the hunger score showed a significant difference ($p=0.016$), A (no hunger 41.7%, slight hunger 12.5%, hungry 12.5%) and B (no hunger 24.5%, slight hunger 38.8%, hungry 36.7%). **Conclusions:** These data suggest that the addition of oral PEPTAMEN® as part of the bowel preparation regimen did not significantly alter the luminal cleanliness score during colonoscopy while alleviating hunger.

Keyword: Colonoscopy; Bowel preparation; Quality; Low residue; Enteral formula