대장내시경 전처치제로서 Polyethylene Glycol 분할용액과 Sodium Phosphate 용액의 비교 연구

서은희 · 김태오 · 김태균 · 주희린 · 박종하 · 박승하 · 양성연 · 문영수
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Comparison of Split-dosing PEG Solution vs. Sodium Phosphate Solution for Colonoscopy Preparation

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Background and Study Aims: A conventional one dosing polyethylene glycol (PEG) provide equivalent efficacy but are poorly tolerated compared to sodium phosphate (NaP) solution. The aims of this study was to compare the efficacy and tolerability of split dosing PEG solution with sodium phosphate solution for colonoscopy preparation.

Method: A single-center, prospective, randomized, investigator-blinded trials was performed. A total of 199 patients (mean age: 49.1 years; 99 men, 100 women) were randomly assigned to receive sodium phosphate solution (n=98, group A) or split dosing PEG solution (n=101, group B). The primary outcome was the overall efficacy of colon preparation, which was evaluated using Ottawa scale. Tolerance and adverse events were secondary outcomes and assessed by questionnaire.

Results: The efficacy of whole bowel preparation was no significantly different between group A (NaP) and B (PEG) (group A; 5.45 vs group B; 5.86, \( p=0.12 \)). There were also no significant difference in compliance (\( p=0.19 \)) and tolerability (\( p=0.45 \)) between the groups. The overall incidence of adverse events was not significant different between the two groups, but group B had tendency to be less frequent (\( p=0.07 \)) and had significantly lower incidence of nausea and vomiting (\( p=0.02 \)).

Conclusions: Split dosing PEG solution, compared with NaP solution produce equivalent colon cleansing efficacy, tolerability and compliance, are associated with fewer nausea and vomiting.

Key Words: Colonoscopy, Bowel preparation, Polyethylene glycol, Sodium phosphate