

Efektivitas Kombinasi Natrium Fosfat dan Bisacodyl terhadap Pembersihan Kolon: Evaluasi Menggunakan Boston Bowel Preparation Scale (BBPS) dalam Kolonoskopi

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Abstrak

Latar Belakang:

Kolonoskopi merupakan metode utama dalam deteksi dini dan terapi kelainan kolon, termasuk polip dan kanker kolorektal. Keberhasilan prosedur ini sangat bergantung pada kualitas pembersihan kolon. Regimen natrium fosfat (Na Fosfat) sering digunakan karena volumenya kecil, tetapi efektivitasnya masih bervariasi. Penambahan bisacodyl sebagai agen stimulan diduga dapat meningkatkan efektivitas persiapan tanpa menambah efek samping bermakna.

Metode:

Penelitian prospektif komparatif ini melibatkan 42 pasien kolonoskopi elektif, yang dibagi menjadi dua kelompok: kombinasi Na Fosfat 45 ml + Bisacodyl 10 mg (n=21) dan Na Fosfat 45 ml tunggal (n=21). Variabel utama adalah skor BBPS total dan per segmen kolon, sedangkan variabel sekunder mencakup efek samping (mual, muntah, diare, nyeri perut) serta faktor demografi (usia, jenis kelamin, IMT, riwayat operasi, elektrolit). Analisis dilakukan dengan uji Chi-square/Fisher dan regresi logistik, dengan nilai $p < 0,05$ dianggap signifikan.

Hasil:

Kelompok kombinasi menunjukkan proporsi skor BBPS ≥ 8 lebih tinggi dibandingkan kelompok tunggal (71,4% vs 23,8%; $p=0,002$). Skor rata-rata BBPS juga lebih tinggi pada kolon kanan (2,81 vs 2,43; $p=0,012$), kolon transversum (2,86 vs 2,52; $p=0,008$), dan kolon kiri (2,90 vs 2,57; $p=0,006$). Analisis multivariat menunjukkan bahwa kelompok obat merupakan prediktor independen keberhasilan pembersihan kolon (OR 18,31; CI 95%: 3,26-102,87; $p=0,001$). Riwayat operasi abdomen memiliki kecenderungan menurunkan skor BBPS (OR 0,20; CI 95%: 0,03-1,28; $p=0,089$), meskipun tidak signifikan. Efek samping mual, muntah, diare, dan nyeri perut relatif seimbang di kedua kelompok ($p > 0,05$). Perubahan elektrolit natrium terjadi pada sebagian kecil pasien, tetapi tidak bermakna secara klinis.

Kesimpulan:

Kombinasi Na Fosfat + Bisacodyl lebih efektif dibandingkan Na Fosfat tunggal dalam

Effectiveness of Sodium Phosphate and Bisacodyl Combination on Colon Cleansing: Evaluation Using the Boston Bowel Preparation Scale (BBPS) in Colonoscopy

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Abstract

Background:

Colonoscopy plays a crucial role in the early detection and management of colonic disorders, including polyps and colorectal cancer. The success of this procedure largely depends on the quality of bowel preparation. Sodium phosphate (NaP) is commonly used due to its low volume, although its effectiveness may vary. The addition of bisacodyl, a stimulant laxative, is hypothesized to enhance cleansing efficacy without increasing adverse events.

Methods:

This prospective comparative study included 42 elective colonoscopy patients, equally divided into two groups: NaP 45 mL + bisacodyl 10 mg (n=21) and NaP 45 mL alone (n=21). The primary outcomes were total and segmental scores of the Boston Bowel Preparation Scale (BBPS). Secondary variables included adverse events (nausea, vomiting, diarrhea, abdominal pain), demographic factors (age, sex, BMI, history of abdominal surgery, electrolyte levels). Statistical analysis involved Chi-square/Fisher's exact tests and logistic regression, with $p < 0.05$ considered significant.

Results:

The combination group showed a significantly higher proportion of patients achieving BBPS ≥ 8 compared to the single-agent group (71,4% vs 23,8%; $p=0.002$). Mean BBPS scores were also significantly better in the right colon (2.81 vs 2.43; $p=0.012$), transverse colon (2.86 vs 2.52; $p=0.008$), and left colon (2.90 vs 2.57; $p=0.006$). Multivariate analysis identified the regimen group as an independent predictor of successful cleansing (OR 18.31; 95% CI: 3.26-102.87; $p=0.001$). A history of abdominal surgery showed a trend toward lower BBPS scores (OR 0.20; 95% CI: 0.03-1.28; $p=0.089$). Adverse events were comparable between groups ($p > 0.05$), and sodium electrolyte shifts were clinically insignificant.



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Boston Bowel Preparation Scale (BBPS) dalam Kolonoskopi

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Conclusion:

The combination of sodium phosphate and bisacodyl is more effective than sodium phosphate alone in improving bowel cleansing quality without increasing significant adverse effects. A BBPS cut-off of ≥ 8 is recommended as a more reliable standard for assessing bowel preparation adequacy.

Keywords: Colonoscopy, sodium phosphate, bisacodyl, Boston Bowel Preparation Scale, bowel cleansing.