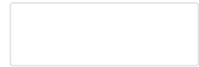


IMPROVED RATES OF ADEQUATE BOWEL PREPARATION AFTER IMPLEMENTATION OF AN INTRAPROCEDURAL CLEANSING SYSTEM OVER A 12-MONTH PERIOD AT A SINGLE-CENTER

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AuthorBlock: Tessa Herman¹, Bryant Megna¹, Nicha Wongjarupong¹, Vijay S. Are¹, Natalie Wilson¹, Anders Westanmo², Susan Lou^{1,2}, Mohammad Bilal^{1,2}, Brian Joseph Hanson^{1,2}

¹Internal Medicine, University of Minnesota Twin Cities, Minneapolis, Minnesota, United States; ²Minneapolis VA Health Care System, Minneapolis, Minnesota, United States;

Abstract Body

Introduction

Adequate bowel preparation is essential for optimal visualization during a colonoscopy, yet inadequate bowel preparation (IBP) remains common despite preprocedural interventions and adherence to preparation protocols. Poor bowel preparation often leads to suboptimal or canceled procedures, causing frustration and lost opportunity time for patients and endoscopists alike. An FDA-approved, 3rd generation over-the-scope intraprocedural cleansing system could serve as a solution for IBP.

Methods

We performed a retrospective study at a Veteran Affairs (VA) hospital over a 12-month period comparing the adequacy of bowel preparation at the time of colonoscopy in the six months before and after the implementation of an intraprocedural cleansing system. IBP was defined as a Boston Bowel Preparation Score (BBPS) of < 6 or a bowel preparation described as poor or inadequate per the Aronchick scale.

Results

We studied a total of 2,367 colonoscopies over a 12-month period from 10/2021 to 9/2022, implementing the intraprocedural cleansing system in 4/2022. There were 1,198 pre-implementation cases from 10/2021-3/2022 and 1,169 post-implementation cases from 4/2022-9/2022. The cleansing system was utilized in 46 cases with an increase in use over time. The IBP rate decreased after the cleansing system was implemented with a pre-implementation IBP rate of 9.3% (111/1,198 cases) and a post-implementation IBP rate of 5.9% (69/1,169 cases) (*Figure 1*). Further analysis of the successful cases using the cleansing system (N=36) revealed a substantive increase in the adequacy of bowel preparation with the average BBPS improving from 4.8 to 8.7. Unsuccessful device cases were almost exclusively related to patient intolerance of sedation or anatomical reasons that precluded even a device-free colonoscope from passing.

Conclusion

This is the first study to compare the rates of inadequate bowel preparation before and after the implementation of an intraprocedural cleansing system. The rates of IBP decreased significantly following the implementation of the intraprocedural cleansing system. The use of this device is both feasible and results in improved bowel preparation rates. Better bowel preparation at the time of colonoscopy may have an important impact in terms of improved examination quality and patient experience, longer duration of surveillance colonoscopy intervals, and decreased suboptimal or canceled procedures with better resource utilization.

