

Factors Affecting Pouchoscopy Bowel Preparation in Patients with an Ileal Pouch Anal Anastomosis

Daniela Fluxa, MD; Luis Nieto, MD; Pedro Palacios, MD; Francis A. Farraye MD, MSc, MACG; Douglas L. Riegert-Johnson, MD; Jana G. Hashash MD, MSc, FACG; MD, PhD, FACG; Jami R. Kinnucan MD, FACG

INTRODUCTION

- Inadequate bowel preparation (prep) limits visualization and can results in the need for repeat pouchoscopy
- There is no standard recommendations for bowel prep prior to pouchoscopy
- Based on our experience, we hypothesized that many patients with history of ileal pouch anal anastomosis (IPAA) undergoing pouchoscopy have inadequate prep

AIM

- To determine factors associated with adequate and inadequate prep in patients undergoing pouchoscopy
- We hope that further analysis of patients with, and without, adequate prep will lead to insights informing the development of a standardize prep.

METHODS

- Retrospective review of adult patients with inflammatory bowel disease (IBD) or polyposis syndromes (PS) who underwent pouchoscopy at a tertiary referral center between June 2020-March 2022.
- Patient demographics, clinical characteristics, oral intake prior to pouchoscopy, recommended bowel prep, and endoscopic bowel prep, pouch age (pouch creation to time of pouchoscopy) were abstracted.
- Inadequate bowel prep was defined as "poor" or "fair" and adequate bowel prep was defined as "adequate", "good" or "excellent" as described by the endoscopist or on review
 - If the quality of the bowel prep was not described, two independent reviewers performed endoscopic photo review (DF, JK).
- χ^2 test was used for comparative statistical analysis, a p value ≤ 0.05 was defined as statistically significant.

TABLE 1. COMPARISON BETWEEN PATIENTS WITH INADEQUATE BOWEL PREP AND APPROPRIATE BOWEL PREP ACCORDING TO CLINICAL AND ENDOSCOPIC CHARACTERISTICS.

| Total = 89 | Inadequate bowel prep (20) | Adequate bowel prep (69) | p value |
|---|----------------------------|---------------------------|---------|
| Indication for IPAA - IBD (72) - Polyposis syndromes (17) | 20 0 | 52 17 | 0.014 |
| Sex - Female (46) - Male (43) | 12 8 | 34 35 | 0.398 |
| Pouch age at time of procedure - <5 years (21) - 5-10 years (28) - >10 years (40) | 5 6 9 | 16 22 31 | 0.98 |
| Oral intake 24 hour prior procedure - Clear liquid diet (32) - Full meal (57) | 5 15 | 27 42 | 0.246 |
| Bowel prep Large volume oral bowel prep (16) Low volume oral bowel prep (11) Low volume oral prep and enema prep (16) Enema prep only (30) No bowel prep (8) | 1 5 4 9 1 | 15 13 12 21 7 | 0.408 |
| Large volume prep given - Yes - No | 1 19 | 15 54 | 0.086 |
| Large/low volume oral bowel prep completeness - Complete bowel prep (100% intake) (31) - Incomplete bowel prep (3) | 5 1 | 26 2 | 0.455 |
| Procedure timing - Morning (60) - Afternoon (29) | 11 9 | 49 20 | 0.178 |
| Presence of distal pouch stricture - Yes (20) - No (69) | 3 17 | 17 52 | 0.363 |

Large volume bowel prep = Golytely, Miralax. Low volume bowel prep: Moviprep, Clenpiq, Suprep, magnesium citrate. Enema prep = tap water or fleet enema.

RESULTS

- Fifty-six patients underwent 89 pouchoscopy evaluations, 27/56 (48%) were female.
- IPAA was indicated for IBD in 47 patients [43 ulcerative colitis, 4 Crohn's disease] and 9 patients with PS.
- Median age at time of procedure was 43y (range 18-71y), median pouch age was 8y (range 0-36y).
- 20 (22%) were noted to have inadequate bowel , 69 (78%) with adequate bowel prep.
- Table 1 compares these two groups.
- 17/17 (100%) of procedures done in patients with PS indication had adequate bowel prep compared to 52/72 (72%) in patients who underwent IPAA due to IBD (p=0.014).
- Other variables were not statistically significant.
- However, inadequate bowel prep was common with enema prep (9/30) and rare with large volume preps (1/16).
- Most PS patient used large volume prep.

DISCUSSION

- About 1 in 5 of patients with IPAA had inadequate bowel prep, all with a history of IBD.
- Inadequate bowel was uncommon with a large volume prep and consideration should be given to large volume prep being standard of care.
- Inadequate prep did not occur in PS patients, perhaps as large volume prep was commonly used by this group.