

Endoscopists' Perspectives on Polyethylene Glycol Electrolyte Lavage Solution vs. Sodium Picosulfate/Magnesium Citrate for Bowel Preparation Before Colonoscopy: A Qualitative Study

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Abstract

Colonoscopy is considered the favored method for diagnosing, inspecting and monitoring gastrointestinal diseases. Adequate preparation of the colon is mandatory for optimal colonoscopy. Polyethylene glycol electrolyte lavage solution (PEG-ELS) and sodium picosulfate/magnesium citrate (SPMC) are the most commonly prescribed bowel cleansing agents. Nevertheless, real-world practice demonstrates divergence, and current recommendations often lack specific guidance. The study was designed to explore endoscopists' viewpoints regarding their preference for selecting either agent, agent effectiveness, tolerability, safety, factors affecting patient compliance and their recommendations to enhance patient preparation. In this qualitative study, face-to-face semi structured interviews were conducted with expert endoscopists who had interest with PEG-ELS and SPMC. They were recruited from two Iraqi tertiary gastroenterology centers. The duration of the data collection lasted from January 13, 2025, to June 1, 2025. Thematic analysis was utilized. Interviews were conducted with 15 endoscopists who had a range of 3 to 27 years of experience, most held gastroenterology and endoscopy subspecialty certification. The study resulted in five main themes: First, different product selection preferences, some endoscopists preferred selecting either agent based on their experiences, while others relied on patient-specific considerations. Second: Agent effectiveness, the majority (n=10, 66.67%) reported comparable quality. Third: Adverse effects, gastrointestinal side effects were more obvious with PEG-ELS. On the other hand, SPMC was well tolerated but cautions should be encountered for elderly and renally impaired patients. Fourth: patient acceptance was associated with drug and patient related factors. Fifth: preparation recommendations, most endoscopists recommend adapting split dose regimen with clear-liquid diet, beside adjuvant laxatives to enhance patient preparation. Finally, both agents deemed effective, however patient tolerability framed by taste, fluid amount, and patient counseling are the decisive factors. These perceptions highlight the need for unified national guidelines to enhance patient preparation and colonoscopy outcomes.

Keywords: BCA, Bowel preparation, Colonoscopy, Endoscopists, PEG-ELS, SPMC.

Introduction

Colorectal cancer is a considerable health issue in Iraq, rating as the ninth prevalence cancer which makes up to 4.7% of all malignancies and is increasing in both genders ⁽¹⁾. Colonoscopy is regarded as the major effective tool for colonic evaluation ⁽²⁾. It provides direct visualization of the mucosa, collection of tissue samples to be analyzed histopathologically and as a therapeutic procedure when necessary ⁽³⁾.

Despite recent development of colonoscopy techniques in improving the quality of image and procedure performance, procedure effectiveness

relies mainly on bowel preparation quality ⁽⁴⁾. Because poor preparation can obscure mucosal surfaces which leads to increased risk of interval colorectal cancer, missed adenoma detection and requirement of repeat procedure ^(5,6). These consequences not only undermine diagnostic precision but also exacerbate the strain on healthcare systems and prolong prompt intervention ⁽⁷⁾. Therefore, the number of incomplete examinations limits the utility of colonoscopy ⁽⁸⁾.

Historically, enemas were used in conjunction with oral laxatives to cleanse the bowel, while oral cathartic medicines were created more recently to cause diarrhea and rid the intestine of solid waste ⁽⁹⁾. Polyethylene glycol electrolyte solution (PEGELS) is a popular colon-cleansing medicine ⁽¹⁰⁾, which is an inert polymer of ethylene oxide that is made as a non-absorbable solution used to balance fluid and electrolyte fluctuations in isosmotic preparations ⁽¹¹⁾. Another option for bowel preparation is sodium picosulphate/magnesium citrate (SPMC), which is administered orally with clear fluids ⁽¹²⁾. Picosulphate functions as a stimulant, while magnesium citrate is an osmotic laxative. Gut bacteria break down the prodrug picosulfate to produce desacetyl bisacodyl that serves as a stimulant ⁽²⁾.

Literature information confirms the continuing debate on appropriate bowel preparation agents ⁽²⁾. A prospective randomized trial by Klare et al. compared split-dose 4 L PEG with sodium picosulfate/magnesium citrate and reported that PEG achieved significantly higher rates of successful bowel cleansing (82.2% vs. 42.9%; $P < 0.001$), despite being less tolerated ⁽¹³⁾. While a recent prospective observational study by Shan et al. (2025) found comparable adequacy rates between SPMC and PEG-ELS (92.2% vs. 91.3%), it also noted slightly higher total and right-colon Boston Bowel Preparation Scale (BBPS) scores in the SPMC group, emphasizing the role of tolerability and compliance in optimizing bowel preparation ⁽¹⁴⁾.

Preparing patients using split-dose regimen is recommended for morning procedures, by taking half of the volume required the day before the procedure and the second half on the procedure day ⁽¹⁵⁾. The final dose of the preparation is the best to be taken during five hours and completed two hours before the procedure schedule, accompanied by modified diet as a clear liquid or low residue diet regimen ⁽¹²⁾.

There are a lot of bowel preparations, and they all differ in their composition, fluid volume and tolerance, with limited guidelines offered by national societies ⁽¹⁶⁾. The available guidelines recommend agent selection depending on patient's medical history, routine daily medications, and previous colon cleansing quality rather than selecting a single standard agent ^(11,17). This recommendation divergence reflects limited real-world comparison evidence, as highlighted by Gu et al. ⁽¹⁸⁾.

Some qualitative research has explored healthcare professionals' perspectives on colonoscopy practices ^(19, 20). But there has been no qualitative research investigating how endoscopists determine bowel preparation, especially for PEG-

ELS and SPMC, where local circumstances may considerably influence practice. Thus, this study seeks to examine endoscopists' perspectives regarding bowel preparation before colonoscopy, including their preference of using PEGELS or SPMC, agent effectiveness, notable side effects, preferred dietary recommendations, and regimen time. Accordingly, the primary research question guiding this inquiry could be "What are endoscopists' perspectives and decision-making processes regarding the use of PEG-ELS versus SPMC for bowel preparation?"

Materials and Methods

Study design

In this qualitative research design study, guided by an interpretivist research paradigm, endoscopists' perspectives about bowel preparation before colonoscopy were explored to provide in-depth insight into the preferred bowel cleansing agent and related recommendations regarding patients' preparation prior to the endoscopy procedure in Iraqi hospitals. This paradigm assumes that knowledge is socially constructed and that individual's perspectives are shaped by their professional context, making it suitable for exploring views in real-world settings. The interviews were conducted with expert endoscopists by providing them with semi-structured, open-ended questions with probes to get deep, detailed responses.

The interview guide was manually constructed by the research team using artificial intelligence linguistic enhancement model (ChatGPT, open AI). The model was given inputs related to the qualitative objectives of the study that align with international guidelines for purgative recommendations. The interview guide involved two sections. Part 1 contained endoscopists' demographics including gender, age, degree, specialty, and experience years. Part 2 explored participants' perceptions regarding bowel cleansing agents (BCAs) and preparation practices before colonoscopy. This section consisted of nine guiding questions covering (1-2) agent selection and effectiveness (PEG-ELS vs SPMC) respectively; (3-6) comorbidities, side effects, patient tolerability, and factors affecting acceptance; and (7-9) regimen type, dietary, and adjuvant treatment recommendations. The guide was then refined to ensure its clarity and relevance based on reviews from six experts: five academic clinical pharmacists with experience in qualitative research and one board-certified endoscopist.

Setting and participant recruitment methods

To have robust qualitative data from the endoscopist's point of view regarding the type of bowel cleansing preference and related preparation recommendations, one-to-one, face-to-face

interviews were conducted. Fifteen endoscopists were purposively recruited from two tertiary centers: nine from the Gastroenterology and Hepatology Teaching Hospital in Baghdad and six from the Martyr Dr. Majid Mohsen Al-Jubouri Gastroenterology and Hepatology Center in Al-Hillah.

Endoscopists were included if they were specialists in internal medicine with a subspecialty in gastroenterology and endoscopy possessed a minimum of one year of colonoscopy experience, routinely prescribed both PEG-ELS and SPMC in their clinical practice, and provided verbal consent, including agreement to audio recording. Physicians from non-internal medicine specialties, those lacking colonoscopy experience, and those without prior exposure to either PEG-ELS or SPMC were excluded from participation.

The study was done after taking verbal consent from each participant before recording. The time and place of the interview were scheduled according to endoscopist's preference.

The study was ethically approved by the ethical committee at the University of Baghdad/College of Pharmacy with approval number (REC062025117R).

Data collection and analysis

A Galaxy Note 9 phone was used to record face-to-face interviews, each lasting from 15 to 20 minutes. Interviews were conducted until saturation was reached, which indicates no additional comments or new data that can be recorded ⁽²¹⁾. The study started on January 13, 2025, and ended on June 1, 2025. Records were transcribed verbatim, and those few Arabic responses were translated to English. Before coding, each transcript was checked twice against the source audio to ensure accuracy. The interviews weren't repeated because participants provided satisfied information at the initial record. The study utilized Braun and Clarke's six-phases to get reflective thematic analysis. These phases include "familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and writing the report" ⁽²²⁾. The study was aligned with the Consolidated Criteria for Reporting Qualitative Research (COREQ), to ensure transparency of the study design, collection of data, analysis, and reporting ⁽²³⁾.

Several methods were utilized to have robust analysis reliability. Line-by-line coding was employed to ensure documentation of all significant meanings of the transcripts. A spreadsheet of Excel as an audit trail was dependent throughout the study to document insights, develop themes and researcher's

reflections. Codes were compared, clustered and refined into themes and subthemes relying on their recurrence across the transcripts. This was enabled by the reflexive thematic analysis technique.

Interview conduction and coding were performed by the primary researcher (a clinical pharmacist, master's candidate, and well-trained qualitative researcher). This background facilitated communication with the endoscopists, framing of questions, and findings interpretation, which contributed to an open discussion with interviewees.

To reduce interpretive bias and get strong inter-coder agreement, reflecting notes were organized during analysis. The second researcher (a board-certified clinical pharmacist) reviewed the coded transcripts independently to verify consistency and credibility of coding. Furthermore, the third co-author (a board-certified endoscopist) performed triangulation to guarantee that themes represented participants' viewpoints rather than researchers' assumptions.

The present investigation is the first qualitative study that encountered endoscopists' experience regarding bowel preparation prior to colonoscopy procedures, and there are no available related qualitative studies that can be used as a standard framework.

Results

This qualitative study involved fifteen endoscopy specialists, each of whom was board-certified in internal medicine specialties. Eleven participants were subspecialized in gastroenterology and endoscopy, while four were in their final year of endoscopic training. The participants' ages varied from 38 to 65 years, while their work experience ranged from 3 to 27 years. Fourteen participants were male, and one was female. Nine endoscopists were affiliated with the Gastroenterology and Hepatology Teaching Hospital in Baghdad, and the remaining six with the Martyr Dr. Majid Mohsen Al-Jubouri Gastroenterology and Hepatology Center in Al-Hillah. The resulting study themes and subthemes are presented in Figure. 1.

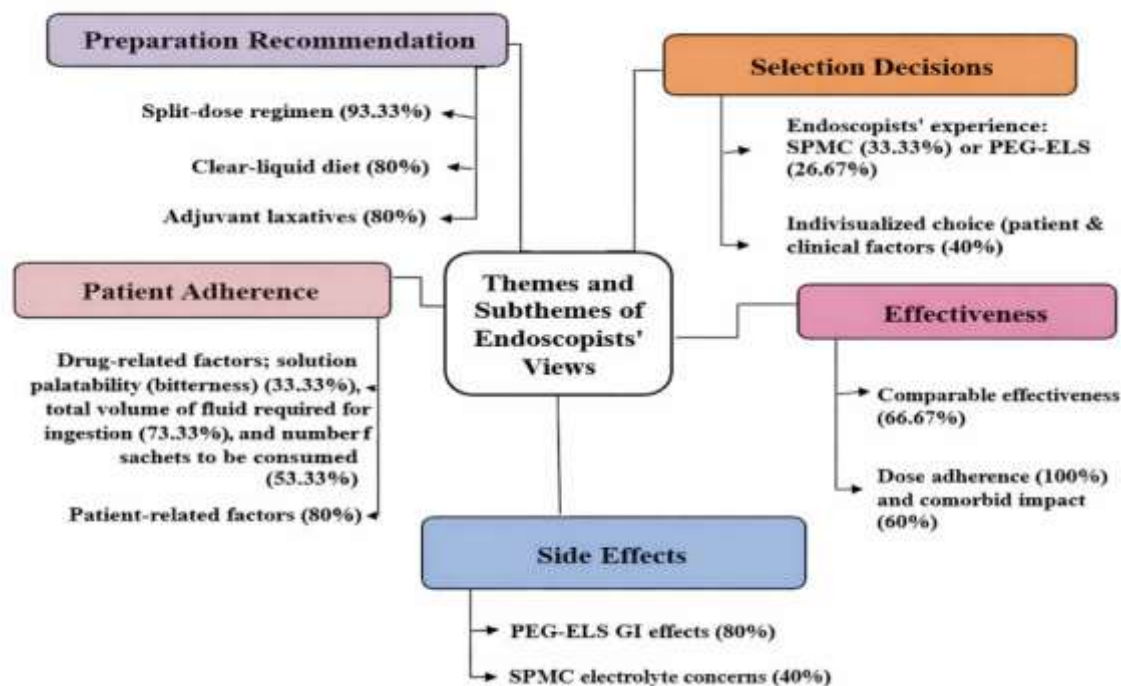


Figure 1. Themes and subthemes of endoscopists' perspectives regarding patient preparation for colonoscopy.

Theme 1: Factors affecting selection decisions for BCAs

The debate over PEGELS or SPMC for bowel cleansing prior to colonoscopy has led to understanding of endoscopists' preferred products and factors influencing their decisions; thus, two subthemes emerged: endoscopists' preference related to their clinical experience and patient-related considerations.

The majority of endoscopists (60%) prefer to select BCAs based on their experience. Some of them (n=4, 26.67%) preferred PEGELS for colon cleansing, while others (n=5, 33.33%) preferred SPMC due to its tolerability, ease of ingesting, and preferable taste.

"..... PEGELS is better because it requires large amounts of fluid to be taken by the patient." E4

"Actually, I used many products, but I haven't found anything better than SPMC because it is easy, safe, and effective, and patients need half a day not to eat only fluid and juice." E14

The other endoscopists (40%) preferred to recommend either cleansing products according to patient health status or preference. Four of them (26.67%) preferred PEGELS for elderly patients, renal and heart failure patients, chronic constipation patients, and aggressive preparation, while for younger patients they preferred SPMC. A few endoscopists (13.33%) discuss the choice of bowel cleansing agent with the patient.

"Accordingly, if old age, comorbidity, or electrolyte disturbance, I give PEGELS. At a young age I give SPMC because of the fear of electrolyte disturbance. So, for any pediatric patient, I will give SPMC, because it is easier." E8

Theme 2: Evaluating the effectiveness of PEG-ELS versus SPMC

Both BCAs (PEG-ELS and SPMC) can be equally effective.

The effectiveness of PEGELS and SPMC cleansing products for colonoscopy preparation in Iraq is unclear. Among the fifteen interviewed endoscopists (93.33% male), most (66.67%; 60% male) reported no difference between the two agents in effectiveness, emphasizing that both were effective when patients adhered to instructions, though a minority of them (13.33%) considered PEG-ELS more reliable due to the higher water intake it required. The remaining endoscopists (n=3, 20%) perceived SPMC as more effective, mainly due to its better palatability, which they believed improved compliance.

"Both of them are effective, but it depends on patient compliance; they have the same efficacy." E13

"I cannot compare the effectiveness during mucosal visualization between the two groups. Some patients taking SPMC are well prepared, while others taking PEG-ELS are also adequately prepared. However, I have observed many patients from both groups who are not well prepared.

What's the exact cause? It is compliance with the preparation, the ineffective dose, or non-commitment to the instructions." E3

BCA effectiveness is highly dependent on completing the entire dose.

There was a general agreement among physicians (n=15) that completing the entire dose is mandatory for getting a reliable cleansing effect for both agents.

"Poor preparation is not related to either agent; the pattern of preparation that patients rely on is not good (not a proper, not a precise procedure). To get reliable cleansing effects, patients should complete the entire purgative dose. So, if they take the precise procedure, I think they are equivalent." E10

Therefore, several participants (n=5) were keen to provide patients with written and verbal instructions.

"Printed paper enhances purgative ingestion and thus effectiveness because only verbal instructions can't be understood and may be forgotten, so printed paper is better with the support of the clinic and also assistant instructions." E7

Comorbid conditions can affect the adequacy of colon cleansing.

Most endoscopists (60%) mentioned common conditions that could affect the adequacy of colon cleansing effectiveness; these include renal failure (n=6, 40%), heart failure (n=2, 13.33%), Alzheimer's (n=3, 20%), diabetes mellitus (n=3, 20%), psychiatric disorders (n=2, 13.33%), hypothyroidism (n=2, 13.33%), constipation (n=4, 26.67%), and aging (n=3, 20%).

"Alzheimer's disease, psychiatric disorders, DM, hypothyroidism, chronic kidney disease, very old and very young patients." E9

On the other hand, one endoscopist (6.67%) was uncertain about the effect of disease on patient preparation, whereas several participants (n=5, 33.33%) confirmed that there was *"no effect of disease on cleansing agent effectiveness."* E13

Theme 3: Side effects and tolerability

The majority of endoscopists (n=12, 80%) reported side effects related to GIT, such as nausea (n=9, 60%), vomiting (n=4, 26.67%), abdominal pain (n=3, 20%), and bloating (n=1) with PEGELS. SPMC, on the other hand, has fewer GI side effects (n=11, 73.33%), but caution is mandatory for electrolyte disturbances (n=6, 40%).

"PEGELS: needs more than one liter of water and the patient complains about nausea and symptoms of vomiting and colicky abdominal pain. SPMC: Patients prefer SPMC because it requires low fluid intake and less nausea than PEGELS." E1

"I have used SPMC for my patients for five years. I have used it for adults and pediatric patients, especially old people and even those with congestive heart failure or diabetic patients. I didn't find any mentionable side effects, even those with fecal impaction." E14

Theme 4: Factors affecting patient acceptance for BCAs

The study categorized factors affecting patient compliance into drug-related and patient-related aspects. Three main drug-related factors affecting patient compliance were taste (n=5, 33.33%), fluid intake (n=11, 73.33%), and number of sachets (n=8, 53.33%). Most endoscopists (80%) attributed poor preparation to patient-related factors such as comorbidities (n=9), side effects (n=2), age (n=4), hunger (n=1), frequent bowel movements (n=1), and preparation time (n=1).

"...amount of preparation (4 liters) and fluid intake, taste, and age (very young age and very old age). Their preparation will be poor...." E8

Theme 5: Preparation recommendations before the colonoscopy procedure.

This theme explores endoscopists' recommendations for enhancing preparation procedures. Three subthemes emerged:

The split-dose regimen is recommended for optimal bowel preparation.

All endoscopists (n=14, 93.33%), except E4, expressed a clear preference for the split-dose regimen, citing its greater ease of use and improved tolerability. For PEGELS, participants recommended initiating the preparation in the afternoon, with a *"4-hour interval between sachets, or administering two sachets every 12 hours"* E11.

In the case of SPMC, *"I prefer a split dose because it gives better preparation, as it is easier for consumption and well tolerated. Patients should have a clear liquid diet and take the first SPMC sachet at 4:00 pm dissolved in 250 ml of water and the second after 12 hr."* E2

Institutional practice differences showed split dose was more easily applied for afternoon appointments in clinics compared to morning procedures at the hospital (n=2), with one endoscopist preferring non-split dosing.

In both regimens, the majority of endoscopists (n=14, 93.33%) consistently recommended that the final sachet be *"completed at least four hours before the procedure schedule."* E15

A Clear liquid diet is recommended before the procedure.

Most endoscopists (n=12, 80%) recommended *"just clear fluid like meat or chicken soup, clear soda drinks, and water at least one to two days before the procedure."* E1. Others (n=3,

20%) recommended a low-residue diet that involves soft food or a light breakfast. Dietary restrictions can range from three days to half a day.

Adjuvant laxative recommendations can add benefits.

The majority of endoscopists (n=12, 80%) preferred to use laxatives (bisacodyl) besides the cleansing product to enhance preparation (n=4, 26.67%), prepare patients with chronic constipation (n=3, 20%), or just to avoid ruining the colonoscopy appointment and fearing inadequate preparation (n=5, 33.33%).

"...patients should take laxatives... I have tried not to give laxatives, and the preparation is effective, especially with SPMC. But we cannot make a risk." E3

Others (n=3) depended *"only on sachets; no need for laxatives."* E7

Discussion

This study investigated endoscopists' perspectives on selecting PEG-ELS or SPMC for colon cleansing prior to colonoscopy. The results revealed that the choice between agents is more influenced by clinician judgment and patient tolerability rather than the perceived effectiveness.

There is complexity regarding clinical decisions, because results showed variability in endoscopists' preferences in choosing either PEG-ELS or SPMC for preparing patients before colonoscopy. While most (60%) depended on their experience, the others (40%) selected the agent relying on patient-related factors (age, comorbidities, and tolerance). The balance that should be encountered between agent efficacy in clinical practice and comfortability of patients aligns the United States Multi Society Task Force on Colorectal Cancer (USMSTF) guidelines that emphasized that no single agent can be superior for all patients⁽²⁾. A few clinicians (13.33%) correlated the choice of agent with patient preference, availability inside institutions, and cost which is also supported by guidelines⁽²⁾.

The majority of endoscopists (n=10, 66.67%) had a general agreement that the bowel cleansing effectiveness is comparable between the two agents. Supporting this is the study performed by Knochova et al. who found no significant difference in bowel cleansing quality or the rate of polyp detection between PEG-ELS and SPMC⁽²⁴⁾. However, opinions differed with two endoscopists favoring PEG-ELS as it offers clearer mucosal visualization, which echoed Jaiswal et al. who identified that PEG-ELS is more effective while using the Aronchick scale⁽⁴⁾. Conversely, three believed that SPMC is superior, relating their opinions to patient compliance. This is similar to the findings of a large meta-analysis that showed

the better tolerated agent, which is SPMC provided more effective results⁽²⁵⁾. This fact indicates that patient acceptance promotes the quality of bowel preparation more than the pharmacological effectiveness of the product.

Nearly one third of participants (33.33%) insisted on the importance of written and verbal instructions, which aligns with the prospective study performed by Jung D. et al. who concluded that bowel preparation quality can be enhanced by providing patients with both written and spoken instructions⁽²⁶⁾. This highlights a notice to a controllable obstacle to the quality of preparation and emphasizes how critical patient education governs colonoscopy outcomes.

Results regarding tolerability also varied, as SPMC was mostly better tolerated, in contrast to PEG-ELS which was associated with more frequent GI adverse effects like nausea, vomiting and bloating (reported by 80% of participants). These findings are consistent with results of many previous studies^(4,16,27,28). Nonetheless, evidence emerged that replacing large volumes of PEG with newer, lower volume, more flavored formulations of PEG can enhance palatability, patient acceptance and indeed better colonoscopy outcomes⁽²⁹⁾. There are cautions in prescribing SPMC for renally impaired patients. This was mentioned by several physicians (40%), who claimed that SPMC can lead to electrolyte disturbances. In contrast, PEG-ELS is considered safe for these populations due to its isotonic component^(11,15).

In contrast to these findings, an observational prospective study performed in Pakistan demonstrated no significant changes of sodium levels after SPMC administration, with only 12% of patients reported hyponatremia after preparation compared to 10% before administration⁽³⁰⁾. These issues are rare in patients with normal kidney functions, as suggested by current studies, however, care is advised with patients suffering from comorbidities⁽³¹⁾.

Unfortunately, the available USMSTF and European Society of Gastroenterology Endoscopy (ESGE) guidelines don't recommend routine check for serum electrolytes prior to colonoscopy, they depend only on contraindicated conditions for these bowel preparations^(2,12). Therefore, PEG-ELS is still the preferred choice for patients vulnerable to electrolyte disturbances, despite its bitter taste and the large volume it requires. Therefore, clinicians, particularly endoscopists, should exercise caution when using SPMC in these vulnerable populations.

When it came to patient comfort, taste and fluid volume were the most influential factors on patient acceptance to complete the entire dosage. These concerns are well-documented in the previous studies, which also noted that poor palatability can affect adherence^(32,33).

Better tolerability and improved colon cleanliness were the main reasons for endoscopists' preference for split-dose regimen recommendations for bowel preparation for both agents. This matches international guidelines, which recommend split dosing for better outcomes ⁽²⁾. The rationale for split-dose is that the first dose eliminates solid stool, and the second dose removes chyme that enters the large bowel overnight after the first dose has finished.

Diet before colonoscopy also showed variation. While 80% recommended either a low-residue or clear-liquid diet, the diet restriction duration ranged from half a day to three days. Studies showed that a single-day restriction is just as effective as longer durations ^(34, 35). These inconsistencies highlight the need for unified dietary instructions that are effective, with the fewest days of restriction, and easy for patients to follow.

Use of additional laxatives was common (80%), especially for patients with constipation or a history of poor preparation. As stated by a study that supported their use, particularly with low-volume preparations but not with large-volume ones ⁽³⁶⁾. Therefore, some endoscopists avoided them to reduce patient discomfort. Simethicone adjuvant uses besides BCAs were not mentioned by any endoscopist, although oral simethicone is currently recommended by the ESGE for bowel preparation ⁽¹²⁾.

Overall, this study revealed that the selection of BCA relies not only on their clinical effectiveness but also on patient-related factors such as tolerability, comorbidities, and patient education. These perspectives from real world practice emphasize endoscopists' practical considerations in endorsing BCA protocols with identification of opportunities for healthcare staff to improve patient outcomes.

Bowel preparation is prescribed and organized primarily by endoscopists, however clinical pharmacists have a critical role in optimizing regimen safety, patient compliance, and counseling, specifically for those with comorbidities and polypharmacy. Understanding endoscopies' perspectives can provide pharmacists with important insights to align with approaches of counseling, personalize selection of regimen and enhance interdisciplinary treatment. These collectively lead to improving colonoscopy. However, focusing on two centers in a single country can limit the transferability of findings to other health care systems that have different patient populations and organization structure. Furthermore, the findings may introduce recall bias, as it depended only on clinical insights without patients' viewpoints to compare

perspectives, which limits experience corroboration.

Conclusion

This study provided a closer look at how Iraqi endoscopists approach patient preparation for bowel cleansing before colonoscopy. Both preparations, PEG-ELS and SPMC, were thought to be good choices. However, the real challenge was how patients handle the preparation and commit the instructions. Endoscopists guarantee that patient tolerability was mostly influenced by agent flavor, the amount of fluid required to be consumed, and patient's adherence to preparation instructions. The split-dose regimen was highly recommended with either a clear liquid or low-residue diet. Diet restriction duration is unnecessary for longer than one day, as longer durations can affect patient compliance. The use of adjuvant laxatives is supported by many endoscopists to avoid poor patient preparation but not to increase agent effectiveness, while simethicone uses for reducing patient flatulence were not encountered. These findings must be evaluated considering several limitations, including the single-country design, dependence on two centers with only clinician recall, and the lack of patients' viewpoints. Future research should explore patients' opinions and assess interventional studies testing the implementation of unified educational instructions.

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Conflicts of Interest

None.

Funding

None.

Ethics Statements

The study was ethically approved by the ethical committee at the University of Baghdad/College of Pharmacy with approval number (REC062025117R). As well as we obtained consent from the study participants before starting the study.

Author Contribution

Study conception and design: B. Hala, J. Mohammed; data collection: B. Hala.; analysis and interpretation of results: H. Hala, A. Ahmed; draft manuscript preparation: H. Hala. J. Mohammed, A.

Ahmed. All authors reviewed the results and approved the final version of the manuscript.

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آراء أطباء التنظير حول استخدام محلول بولي إيثيلين جلايكول الإلكتروليتي مقارنةً ببيكوسلفات الصوديوم/سترات المغنيسيوم لتحضير الأمعاء قبل تنظير القولون: دراسة نوعية هاله وهاب بيبي^١، محمد ياوز جمال^٢ و احمد عبد الحسين جبوري الحلي^٣

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الخلاصة

يُعتبر تنظير القولون من الطرق المفضلة لتشخيص أمراض الجهاز الهضمي وفحصها ومتابعتها. ويُعدّ تحضير القولون بشكل صحيح شرطاً أساسياً لإجراء تنظير القولون على النحو الأمثل. ويُعدّ محلول غسل القولون البولي إيثيلين جلايكول الإلكتروليتي (PEG-ELS) ومحلول بيكوسلفات الصوديوم/سترات المغنيسيوم (SPMC) من أكثر مُنظفات الأمعاء شيوعاً. ومع ذلك تُظهر الممارسة السريرية تبايناً في هذا الشأن، وغالباً ما تفتقر التعليمات الحالية لإرشادات مُحددة. صُممت هذه الدراسة لاستكشاف وجهات نظر أخصائيي التنظير الداخلي فيما يتعلق بتفضيلهم لأجل اختيار أحد العاملين، وفعالية العامل، وتحمله، وسلامته، والعوامل التي تؤثر على امتثال المريض وتوصياتهم لتحسين تحضير المريض. في هذه الدراسة النوعية أجريت مقابلات شخصية شبه منظمة مع أخصائيي تنظير داخلي ذوي خبرة مهتمين بوصف PEG-ELS و SPMC. تم اختيارهم من مركزين متخصصين في أمراض الجهاز الهضمي في العراق. استمرت فترة جمع البيانات من ١٣ يناير ٢٠٢٥ إلى ١ يونيو ٢٠٢٥. استُخدم التحليل الموضوعي في الدراسة. أجريت مقابلات مع ١٥ طبيباً متخصصاً في التنظير، تتراوح خبرتهم بين ٣ و ٢٧ عاماً، ومعظمهم حاصلون على شهادات تخصص فرعي في أمراض الجهاز الهضمي والتنظير. أسفرت الدراسة عن خمسة محاور أساسية: أولاً، اختلاف تفضيلات اختيار المنتج؛ إذ فضل بعض الأطباء اختيار أحد الدواءين بناءً على خبرتهم بينما اعتمد آخرون على الحالات الخاصة بكل مريض. ثانياً، فعالية الدواء؛ حيث أفادت الأغلبية (١٠ أطباء، بنسبة ٦٧,٦٦٪) بجودة مقاربة. ثالثاً، الآثار الجانبية؛ إذ كانت الآثار الجانبية المعوية أكثر وضوحاً مع دواء PEG-ELS. من جهة أخرى كان دواء SPMC جيد التحمل، ولكن هنالك محاذير عند استخدامه مع كبار السن والمرضى الذين يعانون من القصور الكلوي. رابعاً: ارتبط تقبل المريض للدواء بعوامل متعلقة بالمحلول و بالمريض نفسه. خامساً: فيما يخص توصيات التحضير، يُوصي معظم أخصائيي التنظير بتقسيم جرعات الدواء مع اتباع نظام غذائي يعتمد على السوائل الصافية، بالإضافة إلى استخدام المليينات المساعدة لتعزيز تحضير المريض. أخيراً، يُعتبر كلا الدواءين فعالين إلا أن مدى تحمل المريض للدواء، والذي يتحدد من خلال الطعم وكمية السوائل وتوعية المريض، هو العامل الحاسم. تُبرز هذه الآراء الحاجة إلى وضع إرشادات وطنية موحدة لتحسين تحضير المريض ونتائج تنظير القولون. الكلمات المفتاحية: BCA، تحضير القولون، تنظير القولون، أطباء التنظير، PEG-ELS، SPMC.