



**Semana
Digestiva**
Digital 20 e 21 de
novembro
2020

EVALUATION OF THE IMPACT OF PURGATIVE + SIMETHICONE PREPARATION ON SMALL BOWEL CLEANSING USING A VALIDATED CLEANSING SCALE IN THE MIROCAM® CAPSULE PLATFORM

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BACKGROUND

Currently, the European Society of Gastrointestinal Endoscopy (ESGE) recommends that patients ingest a purgative agent (2L of polyethylene glycol (PEG)) and antifoaming agents prior to SBCE, because it was associated with a better visualization.

To date several meta-analyses have tried to pool results on the impact of purgative administration in the diagnostic yield. However the results can be somewhat contradictory because of heterogeneity in study design, variable preparation protocols and inconsistent endpoints. Of note, the vast majority of capsule endoscopy studies are based on *PillCam*® (Medtronic, Yokneam, Israel) SBCE, and it is not known yet if the same results could be applicable to the *Mirocam*® *SBCE system* (IntroMedic, Seoul, Korea). Our global aim is to compare small bowel cleansing and diagnostic yield between 2 preparation protocols (group 1: 2L PEG split-dose the night before plus simethicone versus group 2: clear liquid diet) using *Mirocam*® *CE system* (IntroMedic, Seoul, Korea).

METHODS

Retrospective single-center analysis of CE performed at our center, with a report of bowel cleansing rated by an endoscopist (Brotz scales quantitative index (QI), qualitative scale (QE), and adequate cleansing rate). Sample size was powered to detect a 0.5 difference in the QI scale, which required 125 patients in each group.

RESULTS

Table 1. Study Characteristics

Total of CE (n)	263
Preparation protocol (%)	
Group 1	50,6%
Group 2	49,4%
Females (%)	54,4%
Age (years-old)	56.5±18.0

Table 2. Comparison between 2 different preparation protocols

	Total	Group 1	Group 2	p value
Diagnostic yield	45,2%	47,4%	43,1%	0,48
Findings				
Angiodysplasias	26,9%	32,6%	21,1%	0,21
Inflammatory bowel lesions	56,0%	52,2%	60,0%	
Bowel cleansing				
QE				
Excellent				0,54
Good				
Fair				
Poor				
QI (IQR)	8 (7-9)	8 (7-9)	8 (7-9)	0,1
SBTT	5h9min	4h35min	5h04min	0,03

QE: Qualitative Scale; QI: Quantitative Index; SBTT: Small-bowel transit time

CONCLUSIONS

This study, powered to detect small gains in a validated quantitative scale of small bowel preparation, demonstrated no benefits of a prior preparation with 2L of PEG plus simethicone, although it influenced SBTT.

REFERENCES

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