

## One more reason to avoid purgatives before capsule endoscopy examinations: Hypokalemia and low completion rates

Dear Editor,

We read with great interest the article published by Gan *et al.*<sup>[1]</sup> studying the association between hypokalemia and small bowel capsule endoscopy completion rates. This prospective study describes a significant association between hypokalemia—secondary to polyethylene glycol (PEG) administration before capsule endoscopy procedures—and low rate of complete examinations. In our opinion, these findings may have a great impact on the capsule endoscopy performance in the future. It is well-known that incomplete capsule endoscopy procedures should be reduced as much as possible because, as the authors comment in their article, they may tend to miss lesions resulting in low diagnostic yield. In this study, the rate of complete procedures was 55.6%, which is significantly lower than 80%–90% that is considered standard. Since its introduction by Iddan *et al.*,<sup>[2]</sup> wireless capsule endoscopy has been considered as a first line tool for small bowel examination. Moreover, it has also been considered as a simple and comfortable procedure as the use of laxatives before the exam was unnecessary. However, in the era of high-quality endoscopic examinations, some investigators suggest that the use of some specific drugs and laxatives before capsule endoscopy may improve the quality of mucosal visualization and its diagnostic accuracy. As a result, capsule endoscopy is slowly becoming a more complex and less comfortable procedure than in the past. The question is whether the evidence that supports this idea is strong enough in terms of cleansing scores' validity and reliability, diagnostic and therapeutic impact, and changes in patient's outcome? Several studies aimed to evaluate the need for the administration of laxatives before capsule endoscopy. After a careful review of the published evidence including several meta-analyses,<sup>[3]</sup> one can find confusing conclusions and opposing results which could be related to 1. small simple size in most of the studies — i.e., less than 30 patients, 2. different laxatives (and dosages) such as polyethylene glycol (PEG), phosphates, mannitol, simethicone, and so on, 3. different, subjective, and non-validated cleansing scores, 4. absence of patients' follow-up.

The study by Gan *et al.*<sup>[1]</sup> adds one more reason, that is, the possibility of incomplete procedures due to a PEG-induced

hypokalemia. We strongly believe that these reasons should be taken into account before recommending purgatives for capsule endoscopy exams.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

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Access this article online	
Quick Response Code:	Website: www.saudijgastro.com
	DOI: 10.4103/sjg.SJG_577_18

**How to cite this article:** Macias E, Elosua A, Fernández-Urién I. One more reason to avoid purgatives before capsule endoscopy examinations: Hypokalemia and low completion rates. *Saudi J Gastroenterol* 2019;25:202.

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