



# REVISTA DE GASTROENTEROLOGÍA DE MÉXICO

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## LETTERS TO THE EDITOR

### Video capsule retention in capsule endoscopy: How to prevent, diagnose, and manage that complication<sup>☆</sup>



#### A propósito de la retención de cápsula endoscópica: cómo prevenir, diagnosticar y manejar esta complicación

Dear Editors:

We would like to comment on the article by Dr. Roesch-Dietlen et al.<sup>1</sup> about a patient with Peutz-Jeghers syndrome, in which a video capsule (VC) was associated with bowel obstruction.

VC retention is the most dreaded event in capsule endoscopy. Overall prevalence is around 2%.<sup>2</sup> There are risk factors associated with greater frequency: *a)* suspicion of bowel stricture, *b)* chronic NSAID use, *c)* suspicion of tumor, and *d)* Crohn's disease. In those cases, a prior imaging study is recommended to evaluate the permeability of the small bowel.<sup>3</sup> Computed tomography with oral contrast ("enteric phase" CAT) has greater sensitivity and specificity than bowel transit with barium. However, there is no absolute certainty, given that stricture and capsule retention have been reported, even when imaging studies are normal. Thus, some authors recommend the reabsorbable Agile capsule, but it is not available in Mexico and its results are controversial.<sup>4</sup>

Furthermore, capsule retention is usually asymptomatic and impaction (the term used to describe the lodging of the capsule in the stricture that results in complete bowel obstruction, as was the case of the patient in the article under discussion) is rare, and dependent on the severity of the stricture. The site and nature of the lesion is generally revealed through the retention, enabling the planning of an elective approach. One third of patients are reported to undergo single-balloon or double-balloon enteroscopy or a surgical intervention to simultaneously recover the capsule and treat the cause of the stricture before symptoms develop. The rest of the patients receive medical treatment

or expectant management. Of those patients, half end up having a surgical procedure and the other half spontaneously pass the VC.<sup>5</sup>

Based on the above, we recommend the following measures for reducing the possibility of retention:

1. Before the procedure, look for risk factors of stricture and evaluate intestinal permeability through an imaging study.
2. Upon completing the study, systematically verify capsule expulsion visually or through a plain abdominal x-ray as soon as there are abdominal symptoms, or in 7 days if there are no symptoms, especially in patients with an incomplete study of the small bowel, even when no stricture is detected.
3. When there is retention with stricture, plan the medical, endoscopic, or surgical treatment, focusing first on the underlying disease, and then on the recovery of the VC. In those cases, abdominal symptoms are crucial for determining treatment urgency. In asymptomatic retention with stricture causing partial obstruction, medical treatment or expectant management can result in spontaneous late passage of the capsule, allowing other nonsurgical elective treatment alternatives to be explored.

### Financial disclosure

No financial support was received in relation to this study/article.

### Conflict of interest

The authors declare that there is no conflict of interest.

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1. Roesch-Dietlen FB, Cano-Contreras AD, Meixueiro-Daza A, et al. Bowel obstruction due to capsule endoscopy in a patient with Peutz-Jeghers syndrome [Article in English, Spanish]. *Rev Gastroenterol Mex*. 2017.
2. Rezapour M, Amadi C, Gerson LB. Retention associated with video capsule endoscopy: Systematic review and meta-analysis. *Gastrointest Endosc*. 2017;85:1157–68, e2.
3. Enns RA, Hookey L, Armstrong D, et al. Clinical Practice Guidelines for the Use of Video Capsule Endoscopy. *Gastroenterology*. 2017;152:497–514.

<sup>☆</sup> Please cite this article as: García-Compeán D, González-Moreno EI. A propósito de la retención de cápsula endoscópica: cómo prevenir, diagnosticar y manejar esta complicación. *Revista de Gastroenterología de México*. 2018;83:361–362.

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## “Video capsule retention in capsule endoscopy: How to prevent, diagnose, and manage that complication” by Diego García-Compeán<sup>☆</sup>



### «A propósito de la retención de cápsula endoscópica: cómo prevenir, diagnosticar y manejar esta complicación» de Diego García-Compean

Dear Editors:

Regarding the Letter to the Editor written by Dr. Diego García-Compean related to the article «Bowel obstruction due to capsule endoscopy in a patient with Peutz-Jeghers syndrome» by Roesch-Dietlen et al.,<sup>1</sup> we completely agree with his comments on how to prevent, diagnose, and manage that complication, and would like to add the following:

Without a doubt, video capsule (VC) retention is the most dreaded event of the procedure, with an overall prevalence of 2%, especially in patients with diseases that affect the caliber of the intestinal lumen. However, when the decision was made to perform the study, there were no signs or symptoms suggestive of obstruction, which was why we did not consider it pertinent to carry out bowel transit or computed tomography with oral contrast medium, or use the degradable Agile capsule, in addition to the fact that unfortunately said capsule is not available in Mexico and its results are still controversial.<sup>2</sup>

We agree that management should be conservative and that the procedure of choice for resolving capsule impaction is single-balloon or double-balloon enteroscopy. Its success rate is usually high, although there is little experience with the procedure in Mexico, as stated by García-Correa et al. in their study on a group of 19 patients treated at the *Centro Médico de Occidente* of the *IMSS* in Guadalajara.<sup>3</sup> We attempted to resolve the obstruction in our patient on the seventh day through double-balloon enteroscopy, but it was not successful because of the impaction of the capsule at the stricture site in the terminal ileum. The complication was satisfactorily resolved through bowel resection of the affected zone.

We are in total agreement with the proposed measures for reducing the possibility of video capsule retention that Dr. García-Compean cites in his Letter to the Editor.<sup>4</sup>

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### Conflict of interest

The authors declare that there is no conflict of interest.

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