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LETTER TO THE EDITOR

Mucosal healing in Crohn's disease — Are we reaching as far as possible with capsule endoscopy?

Dear Sir

We read with substantial interest the article named "Sequential capsule endoscopy of the small bowel for follow-up of patients with known Crohn's disease" from Niv E et al. [1]. The authors enrolled 19 patients with active Crohn's disease (CD), and small bowel capsule endoscopy was performed both at baseline and follow-up to evaluate mucosal changes over time, calculating the Lewis Score for activity quantification and assessing mucosal healing. This is undoubtedly a relevant "hot-topic", as mucosal healing is increasingly being recognized as a major determinant on the outcome of CD, correlating better with disease outcomes than clinical activity [2]. In the work reported by Niv et al., there was no correlation between the clinical indexes for disease activity and the Lewis Score calculated in the small bowel capsule endoscopy. It should be noted that in this series many patients had both small bowel and colonic disease, while the Lewis Score is only suitable for the assessment of isolated small bowel disease. This is a relevant issue, as clinical and analytical data were only compared with endoscopic activity in the small bowel, and no data from eventual lesions in the colon were assessed that could be responsible for the symptoms or inflammatory biomarkers profile. Ileocolonoscopy has been regarded as the gold standard for assessing mucosal healing in Crohn's disease, but it is an invasive procedure reaching only to the terminal ileum. New techniques, such as

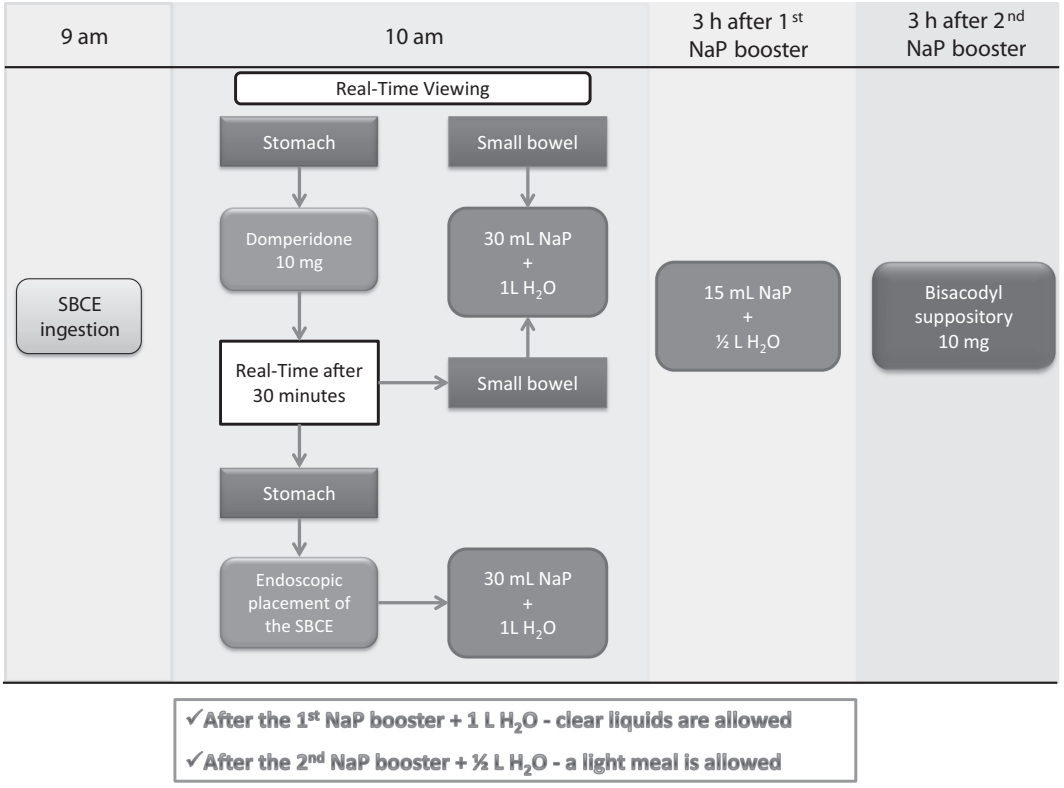

Figure 1. Department protocol for PillCam COLON 2® procedure.

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capsule endoscopy, now allow for the non-invasive observation of the small bowel or even the colon. We have previously demonstrated the advantages of employing capsule endoscopy, and particularly the Lewis Score, for both suspected [3] and established CD [4]. Currently, we are developing a study for evaluating the entire gastrointestinal mucosa using the PillCam COLON2© capsule with a modified preparation protocol (Fig. 1). In our study, we included patients with simultaneous small bowel plus colonic CD, with at least one year of follow-up and in corticosteroid-free remission. Similarly to the study by Niv et al. [1], we found clinical activity to be a poor predictor of mucosal damage, as only 3/12 (25%) of our patients in corticosteroid-free remission achieved entire gastrointestinal mucosal healing. Moreover, we found mucosal healing limited to a single bowel segment (small bowel or colon) in 5/12 (42%) patients (unpublished data). Despite concerns surrounding the use of capsule endoscopy in patients with known CD [5], no retention was observed either during our study or in the work reported by Niv et al. These studies emphasize the important role of capsule endoscopy in the assessment of mucosal healing in patients with known CD, its potential impact on prognosis assessment and therapeutic options, demonstrating as well as its feasibility and safety profile on a practical clinical setting.

Conflict of interest statement

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

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Pedro Boal Carvalho*
Bruno Rosa
Jose Cotter
Centro Hospitalar do Alto Ave, Portugal
*Corresponding author.
E-mail addresses:
Pedroboalcarvalho@chaa.min-saude.pt,
(P. B. Carvalho).

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