

Light flickering through a narrow window opening in capsule panendoscopy



We read with great interest the paper by Vuik et al [1], reporting a single-center experience with application of colon capsule endoscopy as a panendoscopic tool. Both colon capsules and the newer Pill-Cam Crohn's capsule have been used for panendoscopy in several settings. Although with mixed results – mainly regarding adequate colonic cleansing and completion rates [2], the use of camera capsules for the assessment of the whole gut is here to stay. However, as most roses come with thorns, some crucial issues need to be addressed:

1. Colonic cleanliness – Several bowel prep regimens have been extensively analyzed to date. Whereas polyethylene glycol (PEG) + ascorbic acid (also used in this study) failed to show any significant statistical superiority when compared to standard PEG, the use of sodium phosphate (NaP) as a booster was associated with a higher degree of cleansing [3]; as NaP has been withdrawn from many markets due to safety concerns, though, a suitable replacement is still to be found.
2. Completeness and transit times – The lack of a standardized laxative regimen has impacted this quality measure as well. As demonstrated by Vuik et al, a fast, small bowel transit time is not associated with a consistent result in procedure completeness (51.9%); once again, the use of add-on PEG as a booster is not sufficient to obtain satisfactory outcomes [3, 4].
3. Patient acceptance and adverse events (AEs) – Although capsule endoscopy (CE) provides a virtually painless and noninvasive examination compared to conventional colonoscopy, a recent study by our group highlighted how patient preference towards CE is not influenced by its higher tolerability [5]; the major obstacle seems to be related to the burden of bowel preparation, which is also

responsible for the majority of patient-reported AEs [6].

The features of the capsules need drastic improvement to ensure confident lesion characterization and enhanced diagnostic performance if they are to become more than scouts for morphology/pathology. This has often been the focus of discussion in advisory boards and informal lobbying but has yet to materialize for the capsule community.

In conclusion, with the current level of technology fitted in commercially available capsules, the window of opportunity for panendoscopy is indeed narrow [7], but the concept remains appealing and hardware advancements should be on the way to make this happen.

Competing interests

Dr. Koulaouzidis is a consultant for Jinshan. He is director of iCERV Ltd and cofounder of Medicaps Ltd. He has received a Given Imaging Ltd-ESGE grant and material support for clinical research from SynMed/Intromedic. In the last 10 years, he has received honoraria and lecture fees from Jinshan, Dr. Falk Pharma UK, and Ferring. He has also received educational travel support from Aquilant, Jinshan, Dr. Falk Pharma, Almirall, Ferring, and has participated in advisory board meetings for Tillots, Ankon, and Dr. Falk Pharma UK. Dr. Toth has received research grants from the Swedish Cancer Society and Swedish ALF agreement.

The authors

Pablo Cortegoso Valdivia¹, Ervin Toth², Anastasios Koulaouzidis³

- 1 Gastroenterology and Endoscopy Unit, University Hospital of Parma, University of Parma, Parma, Italy
- 2 Department of Gastroenterology, Skåne University Hospital, Malmö, Lund University, Sweden
- 3 Centre for Clinical Implementation of Capsule Endoscopy, University of Southern Denmark, Odense, Denmark

- 3 Centre for Clinical Implementation of Capsule Endoscopy, University of Southern Denmark, Odense, Denmark

Corresponding author

Pablo Cortegoso Valdivia

University Hospital of Parma – Gastroenterology and Endoscopy Unit, Viale A. Gramsci 14, Parma 43126, Italy
Fax: +3905702989
cortegosopablo@yahoo.it

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