# Revisiting the accuracy of anorectal manometry for dyssynergic defaecation

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# To the editor,

We read with interest the paper by Xu *et al.* [1] recently published in this journal. We, however, wish to address a significant discrepancy identified regarding the specificity analysis of anorectal manometry (ARM) for diagnosing dyssynergic defaecation. Contrary to the reported specificity of 72%, the actual specificity in the study by Grossi *et al.* [2] was only 13%.

Our previous study represents a significant contribution to the field of ARM and its application in diagnosing functional defaecation disorders (FDD). One of our central findings (through blinded analysis) was that ARM is unable to discriminate between patients with constipation and healthy volunteers. Despite the widespread use of ARM in diagnosing FDD, our study revealed that nearly 90% of healthy volunteers exhibit abnormal manometric patterns, highlighting the limitations of ARM as a diagnostic tool in FDD. This observation prompted a critical re-evaluation of diagnostic criteria for FDD and underscored the importance of adopting a multiple-testing approach [3].

In addition to correcting the specificity of our study, we wish to highlight the significance of defaecography in providing a comprehensive assessment of evacuatory disorders, including FDD. Xu *et al.* [1] only consider ARM and the balloon expulsion test as diagnostic tools. OPEN

Defaecography plays a pivotal role in patient management as it is the only test capable of diagnosing both functional (e.g. poor opening of the anorectal angle, lack of anal sphincter relaxation) and structural causes (e.g. retaining rectocoele, occluding intussusception), thus providing guidance for individualized treatment [4,5].

As researchers committed to advancing the understanding of anorectal disorders, we acknowledge the need for precision and rigor in our methodology and reporting practices. Given the inaccuracy, we have raised in the current study, one must strongly question how the authors have interpreted the results of other studies included in this meta-analysis. Peer-reviewers must be cognisant of this.

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## **Conflicts of interest**

There are no conflicts of interest.

## References

- Xu D, Kuang M, Liu Y, Jiang H. Diagnostic value of balloon expulsion test and anorectal manometry in patients with constipation: a systematic review and meta-analysis. *Eur J Gastroenterol Hepatol* 2024; 36:534–544.
- 2 Grossi U, Carrington EV, Bharucha AE, Horrocks EJ, Scott SM, Knowles CH. Diagnostic accuracy study of anorectal manometry for diagnosis of dyssynergic defecation. *Gut* 2016; 65:447–455.
- 3 Rao SS, Bharucha AE, Chiarioni G, Felt-Bersma R, Knowles C, Malcolm A, *et al.* Functional anorectal disorders. *Gastroenterology* 2016; 150:1430–1442.
- 4 Grossi U, Di Tanna GL, Heinrich H, Taylor SA, Knowles CH, Scott SM. Systematic review with meta-analysis: defecography should be a firstline diagnostic modality in patients with refractory constipation. *Aliment Pharmacol Ther* 2018; 48:1186–1201.
- 5 Grossi U, Heinrich H, Di Tanna GL, Taylor SA, Vollebregt PF, Knowles CH, et al. Systematic characterization of defecographic abnormalities in a consecutive series of 827 patients with chronic constipation. *Dis Colon Rectum* 2021; 64:1385–1397.

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