# Letter to the Editor

Ann Coloproctol 2022;38(1):93-94 https://doi.org/10.3393/ac.2021.00892.0127



# Comments on: factors predicting the presence of concomitant enterocele and rectocele in female patients with external rectal prolapse

#### Ingrid Melo-Amaral<sup>1</sup>, Adrian Teran-Cardoza<sup>2</sup>, Cristopher Varela<sup>2,3</sup>

<sup>1</sup>Department of General Surgery, Hospital de Clinicas FCM-UNA, Asuncion, Paraguay; <sup>2</sup>Coloproctology Unit, Department of General Surgery, Hospital Dr. Domingo Luciani, Caracas, Venezuela; <sup>3</sup>Department of Surgery, Severance Hospital, Yonsei University College of Medicine, Seoul, Korea

To the editor,

We have read the article written by Tsunoda et al. [1], who suggests the use of evacuation proctography to identify the association of enterocele, rectocele, perineal descent, and pelvic organ prolapse in female patients with external rectal prolapse (ERP), discussing the importance of an adequate pelvic floor evaluation in the surgical treatment planning.

We have performed echodefecography modified from the technique described by Murad-Regadas et al. [2] to evaluate patients with obstructed defecation, which has proven to detect the same anorectal dysfunctions observed in defecography [2, 3]. In favor of this experience, our comments highlight the benefits this technique might offer to overcome proctography limitations and some technical tips to improve the diagnostic performance.

First, while traditional defecography is still the gold standard for evaluating functional anorectal disorders, the benefits are limited by the need for a specific radiological setting, the radiation exposure of patients, and an inability to show all anatomical structures involved in defecation. We can also include the patient's discomfort by an improvised evacuation setting plus the sensation of a synthetic stool inserted into the rectum and the additional vaginal contrast. Echodefecography is a 3-dimensional dynamic ultrasound (3DUS) technique developed to overcome these limitations [2]; it consists of 3 scans performed in lateral decubitus, an initial scan to evaluate the anatomical anorectal elements, a second scan in resting after the introduction of 120 to 160 mL of intrarectal ul-

Received: Oct 11, 2021 • Revised: Nov 9, 2021 • Accepted: Nov 11, 2021 Correspondence to: Cristopher Varela, M.D.

Department of General Surgery, General Surgery III, Hospital Dr. Domingo Luciani, Av. Rio de Janeiro, El Llanito, Caracas 1010, Venezuela Tel: +58-4243092548

E-mail: varela.cristopher@gmail.com ORCID: https://orcid.org/0000-0001-6353-0461

© 2022 The Korean Society of Coloproctology

This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (https://creativecommons.org/licenses/by-nc/4.0) which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited. trasound gel and a final scan for the functional assessment taken from the maximal straining during defecation. Findings in the rectovaginal wall evaluation can correspond to a hernia of the anterior wall of the rectum filled with ultrasound gel by drawing 2 parallel horizontal lines adjacent to the posterior vaginal wall, 1 in the initial straining position, and 1 at the point of maximal straining. Rectocele can be classified according to the distance between these 2 vaginal wall positions: grade I, 2–6 mm; grade II, >6–12 mm; and grade III, >12 mm [4]. In the same scan, rectal intussusception can be identified as an invagination of the anterior or posterior layers of the rectal mucosa, and intestinal loops can be found between the vagina and rectum wall detecting enterocele during the defecation straining [4-6]. We have performed the technique with 2 scans for better timing and patient comfort, with an initial resting scan after injection of the ultrasound gel into the rectum for evaluation of the anatomical pelvic structures and a second scan during sustained straining to identify the depth of rectocele, intussusception, sigmoidocele or enterocele and cystocele by displacement of the bladder neck under the puborectalis muscle.

Second, although echodefecography does not evaluate the degree of perineal descent, a displacement of the proximal border of puborectalis >2.5 cm can determine an excessive descent of the pelvic floor [3]. For complimentary evaluation, we can switch to the same transductor to 3DUS endovaginal modality introduced above the bladder neck, this reliable technique that allows its identification when there is a displacement of the anorectal junction >1 cm or it is positioned below the pubic symphysis during Valsalva maneuver [5], and also being able to identify defects on the levator ani (puborectalis and pubococcygeus muscle). [3] Given this, we can safely include anorectal and endovaginal dynamic ultrasound modalities as preoperative diagnostic tools in centers where 3DUD is available to identify the association between anatomical and functional pelvic anomalies in patients with ERP and its possible influence on the choice of the surgical procedure.



Comments on: factors predicting the presence of concomitant enterocele and rectocele in female patients with external rectal prolapse

Ingrid Melo-Amaral, et al.

Third, we coincided with the authors' statement that patients must have a satisfactory sphincter mechanism to increase the intrarectal pressure during straining to identify the rectocele during proctography accurately [6]. For this matter, 3DUS offers the benefit of allowing the examiner intervention during the study to avoid the escape of ultrasound gel during maximum straining, covering the perineum with the freehand to improve the identification of the rectocele and enterocele.

Once again, we congratulate the authors for their publication.

## **CONFLICT OF INTEREST**

No potential conflict of interest relevant to this article was reported.

## REFERENCES

- 1. Tsunoda A, Takahashi T, Sato K, Kusanagi H. Factors predicting the presence of concomitant enterocele and rectocele in female patients with external rectal prolapse. Ann Coloproctol. 2021;37: 218-24.
- 2. Murad-Regadas SM, Regadas FS, Rodrigues LV, Silva FR, Soares FA, Escalante RD. A novel three-dimensional dynamic anorectal

ultrasonography technique (echodefecography) to assess obstructed defecation, a comparison with defecography. Surg Endosc 2008;22:974-9.

- 3. Murad-Regadas SM, Karbage SA, Bezerra LS, Regadas FS, da Silva Vilarinho A, Borges LB, et al. Dynamic translabial ultrasound versus echodefecography combined with the endovaginal approach to assess pelvic floor dysfunctions: How effective are these techniques? Tech Coloproctol 2017;21:555-65.
- Regadas FS, Haas EM, Abbas MA, Marcio Jorge J, Habr-Gama A, Sands D, et al. Prospective multicenter trial comparing echodefecography with defecography in the assessment of anorectal dysfunction in patients with obstructed defecation. Dis Colon Rectum 2011;54:686-92.
- Murad-Regadas SM, Pinheiro Regadas FS, Rodrigues LV, da Silva Vilarinho A, Buchen G, Borges LO, et al. Correlation between echodefecography and 3-dimensional vaginal ultrasonography in the detection of perineal descent in women with constipation symptoms. Dis Colon Rectum 2016;59:1191-9.
- 6. de la Portilla F, Rubio Manzanares Dorado M, Pino Díaz V, Vazquez Monchul JM, Palacios C, Díaz Pavón JM, et al. The role of tridimensional dynamic ultrasound for pelvic floor evaluation. Cir Esp 2015;93:530-5.