

Imaging in patients with obstructed defecation

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Piloni et al. make an important contribution with “MR-defecography in obstructed defecation syndrome (ODS): technique, diagnostic criteria, and grading” [1]. It is pleasing to see an increasing trend toward comprehensive assessment of patients suffering from ODS in the gray zone between gynecology, urogynecology, gastroenterology, and colorectal surgery inhabited by women experiencing the effects of rectocele, enterocele, rectal intussusception, and anismus. Consensus can only be built on scientific fact, but such fact has first to be uncovered. At the moment, we are still enveloped in ignorance when it comes to the etiology, pathogenesis, and interactions of the conditions that underlie ODS and it is not surprising that there is so little agreement regarding treatment.

Piloni et al. make a bold step toward an all-encompassing classification based on images of disorders of functional anatomy associated with ODS. However, the true value of the paper lies in the detailed descriptions of the patterns of altered anatomy and the ability of magnetic resonance imaging (MRI) to demonstrate them. Classification and categorization may have to wait, eventually to be informed by a more solid understanding of etiology and pathophysiology, but the authors are to be congratulated for their efforts and for making such a compelling case for the inclusion of the imaging specialist (rather than the image alone) in the multidisciplinary approach to this disorder.

The use of MRI is restricted by availability and cost and it must be acknowledged that MRI is not as dynamic as translabial or transperineal ultrasound imaging which has been developing in this field over the last 20 years. Indeed, 4D translabial imaging allows multiplanar or tomographic

real-time imaging in any freely definable plane, has excellent tissue discrimination, and also visualizes the modern mesh implants that are virtually invisible to radiological techniques including MRI [2]. The dynamic nature of ultrasound (allowing acquisition speeds of 30 Hz and more in a single plane and 4–8 Hz in volumes encompassing the entire pelvic floor) continues to inform the understanding of functional anatomy and tissue biomechanical properties and is an alternative to defecography [3, 4].

Ultrasound has provided a wealth of insight into the role of the levator ani for pelvic organ support and anorectal function. We now know that the levator ani is commonly damaged in childbirth [5, 6], that the use of forceps is the main risk factor [7], and that such tears and overdistension lead to excessive distensibility of the levator hiatus, the largest potential site for herniation in the human body [8]. This damage is associated with symptoms and signs of female pelvic organ prolapse [8, 9], with rectal intussusception [10] and with prolapse recurrence after pelvic reconstructive surgery [11–13].

It is no surprise that a radiologist is likely to prefer MRI and a clinician the convenience and instant availability of an ultrasound machine: each has its strengths and weaknesses. It is likely that each imaging modality may complement the other, with the MRI’s “reach” and the ultrasound’s sense of compliance and movement complementing one another. MRI is not as good as ultrasound for demonstrating “ballooning,” for example, and ultrasound cannot show the pudendal nerves.

One paradoxical “disadvantage” of ultrasound is that it may be too inexpensive and too simple. The formality, expense, and inconvenience of an MRI lend the technique a gravitas that may be out of proportion to its value in this syndrome at the moment.

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Nonetheless, the problem of ODS deserves all of the attention it can attract and we are grateful to Piloni et al. for directing their powerful magnet to the pelvic floor. Their approach is bound to lead to a greater understanding of the conditions involved and will provide a bridge for the different specialties dealing with pelvic floor disorders [14]. We will not just gain a greater understanding of what ails our patients—we will better understand each other.

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