

Commentaries

The paper by Zahid et al is an epidemiological study of the understanding, investigation and management of intra-rectal intussusception and overt external rectal prolapse. 126 responses were received, the results of which highlight the significant discordance in the approach to managing this condition. Why is there such discordance?

Table 3, evaluates the understanding of two aspects of rectal prolapse by the respondents to the questions that start, “Do you believe in the theory that.....?” . To which theory are the authors alluding? They do not provide any references to any theory. What they are asking is “do you accept that the co-existence of IRP and ODS are related?”, and “do you accept that the co-existence of IRP and faecal incontinence (FI) are related? The significant differences in the response suggest that within colorectal circles there is little understanding of causation or the awareness of any theory that might accurately determine the answer to some of these questions. The next question to ask is, “are you aware of the Integral Theory by Petros and Ulmsten!”

The Integral Theory relates symptoms of pelvic dysfunction to pelvic supporting ligamentous weakness. It relates the the co-existence of numerous pelvic symptoms such as ODS, faecal incontinence, urinary urgency and urge incontinence, pelvic pain, nocturia and others. The symptoms are related to weakness in the uterosacral, cardinal, pubourethral and deep transverse perineal pelvic ligaments. Does the co-existence of ODS and FI suggest a role for this theory, that relates these symptoms predominantly to weakness in the uterosacral ligaments? Is it *the* Theory the authors might be looking for?

Together as four subspecialties, uro(gynaeco-)logists, gynaecologists and colorectal surgeons admit they have made little impact over the last half century into dealing with the above mentioned symptoms. Numerous procedures exist for the management of prolapse. Many are successful at dealing with the prolapse, but only the prolapse.. None are aimed at symptoms. None are aimed at ligamentous support. Could the Integral Theory be the missing link?

First colorectal surgeons should read and familiarise themselves with the Integral Theory. Then they should read the papers by Abendstein² and Haverfield³. Only then can we start to transform discordance into concordance.

REFERENCES

1. Petros PE & Ulmsten U. *An Integral Theory of female urinary incontinence*. Acta Obstetrica et Gynecologica Scandinavica, Supplement 153, 1990; 69: 1-79.
2. Abendstein B, Brugger BA, Furtsschegger A et al. *Role of the uterosacral ligaments in the causation of intrarectal intussusception, abnormal bowel emptying, and faecal incontinence - a prospective study*. Pelviperineology 2008;27:118-21
3. Haverfield M. *Tissue Fixation System (TFS) neoligament pelvic organ repair procedures - 12 and 24 month results*. Pelviperineology 2015;34:70-74.

DARREN GOLD

University of NSW, Professorial Dept of Surgery, St Vincent's Hospital - dandjgold@googlemail.com

I congratulate the authors on an important contribution. They identify generational approaches to management of rectal prolapse and the various rationales thereof.

It is a little bold for a gynecological surgeon to make a comment on colorectal surgical techniques for correction of rectal prolapse. In the search for legitimacy, I revert to the basic anatomy of the female pelvic floor, the directional vector forces which activate anorectal closure and evacuation¹⁻³ and to general surgical reconstructive principles.

Drawing parallels prior between rectal prolapse surgery and the midurethral sling for cure of urinary stress incontinence (USI), prior to the present dominance of the midurethral sling, there had been > 160 operations described. So the presence of so many different rectal prolapse techniques indicates to me, at least, that none of them are sufficiently superior to dominate.

My view is the reason for so many techniques is that none of the operations which are performed address the underlying pathogenesis, which is that, due to childbirth and age changes, the USLs become loose. This looseness allows the uterus to prolapse downwards *along with the rectum*. The evidence that this may be so comes from cadaveric dissections at the University of Padova, Italy where loose ligamentous reflections were found between uterosacral ligaments (USL) and the lateral walls of the rectum; also by observing the results from patients treated for uterine prolapse with the TFS (Tissue fixation System); these operations work by shortening and reinforcing the USL and cardinal (CL) ligaments. We have found that along with the uterine prolapse, hemorrhoids and rectal prolapse usually disappear following TFS CL/USL ligament reconstruction.

It is clear from Fig. 1 that a mesh inserted onto the anterior rectal wall does not address elongated USLs. Rather, it risks stretching the anterior rectal wall upwards towards the promontory. The vector force created is at 45 degrees to that of the USLs. It could be predicted from this, that a rectum which has been overdistended upwards by a rectopexy mesh would prevent the descent observed during anorectal closure and defecation¹⁻³. This may result in fecal incontinence, obstructive defecation, or both⁴.

REFERENCES

1. Petros PE, Swash M. *Directional muscle forces activate anorectal continence and defecation in the female*. Pelviperineology, 2008; 27: 94-97.
2. Petros P, Swash M, Bush M, Fernandez M, Gunnemann A, Zimmer M. *Defecation 1 – Testing a hypothesis for pelvic striated muscle action to open the anorectum*. Techniques in Coloproctology 2012 DOI 10.1007/s10151-012-0861-2
3. Bush M, Petros P, Swash M, Fernandez M, Gunnemann A. *Defecation 2: Internal anorectal resistance is a critical factor in defecatory disorders*. Techniques in Coloproctology 2012 DOI 10.1007/s10151-012-0860-3
4. Petros PEP, Swash M. *Sacrocolpopexy may cause difficult defecation by inhibiting the external opening out mechanism*. Int. Urogyn. J., 2011; 22 (2): 255-255 2010 DOI: 10.1007/s00192-010-1292-0.

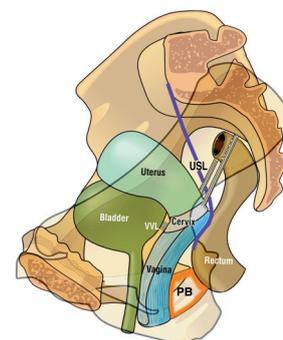


Figure 1. – Pelvis, organs and rectopexy mesh, standing position. Rectopexy tape in purple attaching anterior rectal wall to the sacral promontory. In the normal patient, lateral ligament reflections from the uterosacral ligaments (USL) suspend the rectum to the skeleton. The distal 2-3cm of urethra, vagina and rectum are tightly adherent to each other and to the perineal body (PB).

PETER PETROS

St Vincent's Hospital Clinical School - Professorial Unit, Department of Surgery University of NSW, Sydney - pp@kvinno.com