

Correction of anterior rectal wall prolapses after insertion of a vaginal pessary

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Dear Sir,

Rectoceles are frequently found in patients with intractable evacuatory disorders. Typically, the patients complain of difficulties in evacuation, incomplete evacuation, and sometimes, assisted digitation to aid defecation, fecal incontinence, “constipation”, feeling of a mass in the pelvis, pelvic pain and pain on intercourse. Occult rectal prolapse has been found in 33 % of patients with rectoceles and defecatory dysfunction [1].

In 2008, Abendstein et al. [2] performed a three-level repair in patients with “obstructive defecation”: posterior sling for repair of the uterosacral ligaments, repair of the rectovaginal fascia and where relevant, repair of the perineal body. He reported normalization of defecation in 45 (94 %) of 48 patients. Of the 27 patients with fecal incontinence, 18 (66 %) reported cure, 5 (19 %) > 50 % improvement and 4, no change. Postoperative proctograms showed resolution of the rectal intussusception in 89 and 94 % reported completely normal defecation after surgery. Abendstein explained cure of the prolapse by reference to Baden Walker’s tent theory [3]: laxity of the ligaments/fascial structures supporting the vaginal apex/anterior rectal wall allowed the anterior rectal wall to prolapse inwards, resulting in anterior rectal wall intussusception. While Abendstein attributed the prolapse mainly to the uterosacral ligaments (USL), in our opinion, simultaneous

repair of all 3 supporting layers, USL (level 1), rectovaginal fascia (level 2) and perineal body (level 3) was the key to his success, as it is explained by the musculo-elastic theory [4].

We inserted a 3 × 6 cm cylindrical Pro Dry® pessary (Innocept, Gladbeck, Germany), designed to support the vaginal apex, in a 63-year-old multiparous patient with 3 vaginal deliveries who presented with constipation associated with 1st degree uterine prolapse, 2nd degree rectocele and anterior rectal wall intussusception. Symptoms improved dramatically after pessary insertion. The patient was tested by transperineal ultrasound with a 3.5 MHz curvilinear probe (Brüel & Kjær Medical, Peabody MA, USA). On testing with transperineal ultrasound, anterior rectal wall intussusception was seen at rest (Fig. 1). After insertion of a pessary, on straining, the pessary is seen to elevate the posterior vaginal fornix with “stretching” up of the intussusceptions (Fig. 1).

The “tent” analogy describes how a pessary can restore apical vaginal prolapsed and rectal intussusception. If a tent is not tightly stretched, its apex and walls can prolapse inwards. The 6 × 3 cm ProDry® pessary is pushed backwards into the posterior fornix of vagina pushing back the prolapsed apex and simultaneously with it, the attached and prolapsed anterior wall of rectum. The ProDry® pessary mimicked the effect of stretching the vaginal apex upwards with a posterior sling [5]. From an anatomical perspective, the close attachment of rectum to the upper part of the posterior vaginal wall and the suspensory USL means that if the ligaments are loose, both rectum and apex may prolapse simultaneously, leading sometimes to anterior rectal wall intussusception. We have shown previously that a firm uterosacral ligament is important in the mechanics of defecation, as it anchors the downward vector which opens out the anorectum [6], which in turn decreases the internal

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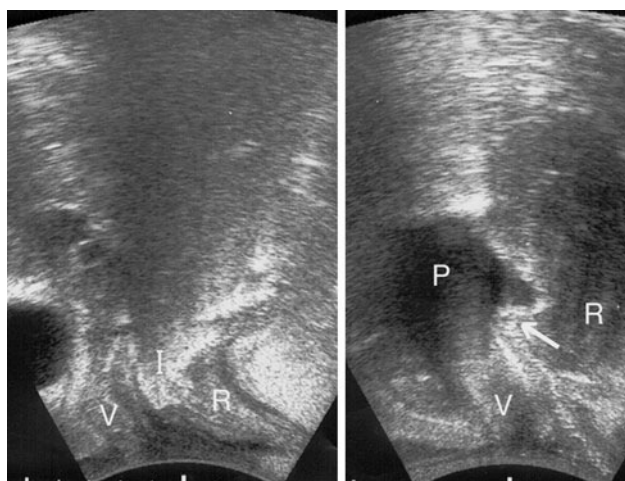


Fig. 1 Transperineal ultrasound: *Left side*, at rest, no pessary. *Right side*, patient straining. Pessary “P” in the apical part of the vagina. Note “stretching out” of the intussusception (white arrow) I intussusception, V vagina, R rectum

68 resistance to the passage of the stool by at least to the 3rd
69 power of change in diameter of the rectum [7]. However,
70 this hypothesis does not explain anterior rectal wall intus-
71 susception in the absence of apical prolapse.

72 Posterior sling operations shorten and reconstruct the
73 USL and pull up the prolapsed rectum by virtue of the close
74 attachments between rectum and vaginal apex. These
75 operations promise a far less invasive type of rectopexy

than existing abdominal procedures [2]. More studies,
however, are required.

Conflict of interest None.

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