

WHICH BOWEL SYMPTOMS ARE MOST PREDICTIVE OF A TRUE RECTOCELE?

Hypothesis / aims of study

The clinical finding of a rectocele is common and may be due to a defect of the rectovaginal septum, perineal hypermobility, a deficient perineum or, occasionally, an isolated enterocele (1). Generally, incomplete bowel emptying and digitation are held to be symptoms pathognomonic of a true rectocele, i.e., a defect of the rectovaginal septum causing a herniation of the anorectum into the vagina (2). The author undertook to correlate symptoms of bowel dysfunction with findings on translabial ultrasound which can be used to differentiate true rectoceles from perineal hypermobility and isolated enterocele (3).

Study design, materials and methods

In a prospective observational study, 505 women were seen in tertiary Urogynaecological clinics and underwent a standardized interview which included a set of questions regarding bowel function. They were assessed clinically (simplified ICS POP-Q grading) and by translabial ultrasound, supine and after voiding. The presence of a rectocele was determined on maximal Valsalva (best of at least 3 attempts, no standardisation for intraabdominal pressure). A defect of the rectovaginal septum was identified as a discontinuity or gap in the anterior anorectal muscularis, measuring ≥ 10 mm in depth (see Figure).

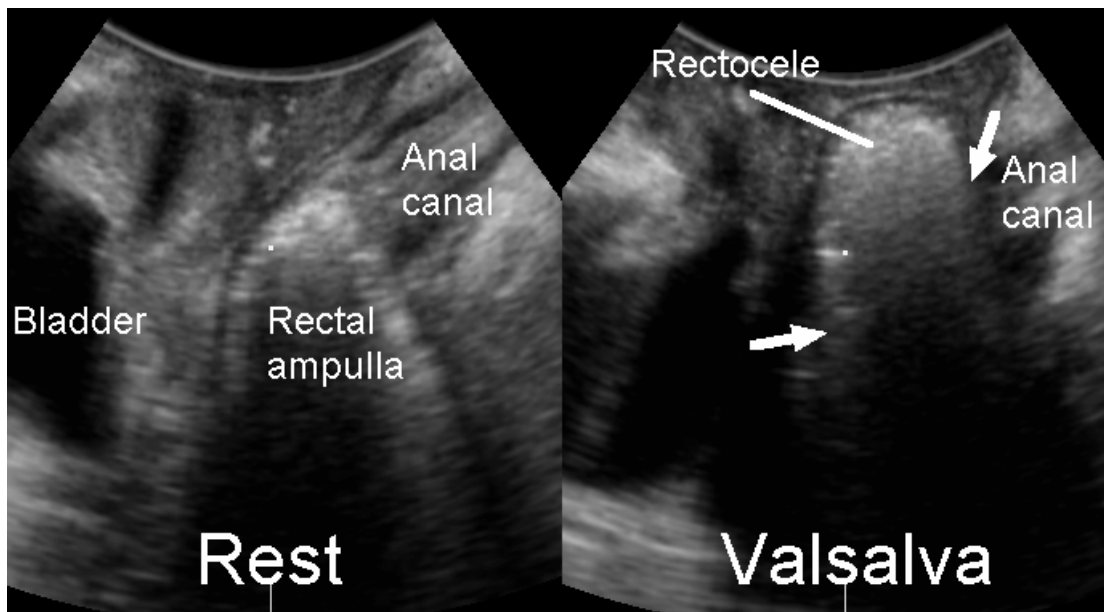


Figure: True rectocele, i.e., a defect of the rectovaginal septum with herniation of rectal mucosa and contents into the vagina, as diagnosed by translabial ultrasound. Midsagittal view at rest (left) and on Valsalva (right). The arrows indicate the margins of the herniation. The depth of this rectocele was measured at 18 mm.

Results

Average age was 54.3 (range 17.9- 87.5) years. Mean vaginal parity was 2.6 (0-11). A previous hysterectomy was reported by 135 (27%), previous anti- incontinence procedures by 77 (15%). Vaginal examination data was available in 493 women. Clinically, 314 (64%) were found to have a rectocele (Grade 1= 173 [35%], Grade 2= 93 [19%] and Grade 3= 48 [10%]). The position of the rectal ampulla was measured on average at 3.5 mm below the symphysis pubis on Valsalva (range 47.1 mm above to 40 mm below the symphysis pubis). There were highly significant associations between clinical staging and ampullary descent ($P < 0.001$), the presence of a true rectocele ($P < 0.001$) and the depth of a defect, when present ($P < 0.001$).

Table 1 demonstrates mean descent of the rectal ampulla versus ICS POP-Q staging, table 2 shows the prevalence and depth of defects according to ICS POP-Q staging. .

Rectocele	N	Mean	SD
Grade 0	179	13.4	15
Grade 1	173	-8.6	12.71
Grade 2	93	-16.03	10.18
Grade 3	48	-24.11	7.3

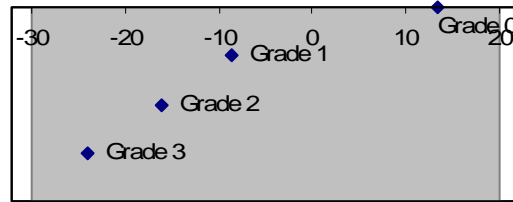


Table 1: Mean descent of the rectal ampulla versus ICS POP-Q staging (P<0.001 on ANOVA).

Rectocele	N	Defects	Mean depth in mm
Grade 0	179	23/179 (13%)	17.4 (SD 5.3)
Grade 1	173	117/ 174 (67%)	17.2 (SD 6.1)
Grade 2	93	82/93 (88%)	19.9 (SD 6.1)
Grade 3	48	46/48 (96%)	28.0 (SD 9.7)

Table 2: Prevalence of true defects of the rectovaginal septum according to ICS POP-Q staging (P< 0.001 on X2 test for trend and ANOVA).

Defects of the anorectal muscularis, implying a true rectocele, were identified in 54%. They were on average 19.9 (10 to 55.3) mm deep and 21.9 (4.9 to 54.5) mm wide. Table 3 shows associations between symptoms on the one hand and the presence of a true rectocele and its depth on the other hand.

Symptom	Presence	Depth of rectocele
Chronic constipation	P= 0.04	n.s.
Frequent straining at stool	n.s.	P= 0.005
Incomplete bowel emptying	P< 0.001	P< 0.001
Digitation	P= 0.002	n.s.
Pain on defaecation	P= 0.01	n.s.
Lump in vagina	n.s.	P< 0.001
Faecal incontinence	P= 0.02	n.s.

Table 3: Associations between bowel symptoms, presence and depth of a true rectocele as demonstrated on translabial ultrasound (Fisher's exact test and t- test).

Interpretation of results

True rectocele, i.e., a defect of the rectovaginal septum with herniation of rectal mucosa and contents into the vagina, are found in over half of women presenting with symptoms of pelvic floor disorders. The finding correlates strongly with clinical prolapse grading - the larger the rectocele is clinically, the more likely it is to be due to a fascial defect. Incomplete emptying and digitation are strongly associated with fascial defects. Increasing depth of a rectocele seems to increase the likelihood of symptoms such as frequent straining at stool, incomplete bowel emptying and the sensation of a vaginal lump. Many rectoceles however are asymptomatic, and many women with incomplete emptying and digitation do not in fact have the condition.

Concluding message

The symptoms of incomplete bowel emptying and digitation are most strongly associated with the finding of a true rectocele on translabial ultrasound.

References

1. Female Urology and Urogynecology. London: Isis Medical Media; 2001. p. 576-85.
2. Contemp Rev Obstet Gynecol 1997; 303-310
3. Ultrasound Obstet Gynecol 2004; 23: 80-92.