

How large does a rectocele have to be to cause symptoms? A 3D/4D ultrasound study.

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INTRODUCTION:

Rectocele is a common condition, which on imaging is defined by a pocket identified on Valsalva or defecation. Cut-offs of 10 and 20 mm for pocket depth have been described. This study analyses the correlation between rectocele depth and symptoms of bowel dysfunction to define a cut-off for the diagnosis of "significant rectocele" on ultrasound.

METHODS:

A retrospective study using 564 archived data sets of patients seen at tertiary urogynaecological clinics. Patients underwent a standardised interview including a set of questions regarding bowel function, and translabial 3D/4D ultrasound. Assessments were undertaken supine and after voiding. Rectocele depth was measured on Valsalva.

RESULTS:

Out of 564, data on symptoms was missing in 18 and ultrasound volumes in 25, leaving 521. Mean age was 56 years (range 18-86), mean BMI 29 (17-56). Presenting symptoms were prolapse (51 %), constipation (21 %), vaginal digitation (17 %), straining at stool (46 %), incomplete bowel emptying (41 %) and faecal incontinence (10 %). A clinically significant rectocele (ICS POPQ stage ≥ 2) was found in 48 % (n=250). In 261 women a rectal diverticulum was identified, of an average depth of 17 (SD, 7) mm. On ROC statistics a cut-off of 15 mm in depth provided optimal sensitivities of 66 % for vaginal digitation and 63 % for incomplete emptying, and specificities of 52 and 57 % respectively.

CONCLUSIONS:

Rectocele depth is associated with symptoms of obstructed defecation. A "clinically significant" rectocele may be defined as a diverticulum of the rectal ampulla of ≥ 15 mm in depth, although poor test characteristics limit clinical utility of this cut-off.