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TRANSANAL OR VAGINAL APPROACH TO RECTOCELE REPAIR: RESULTS OF A PROSPECTIVE RANDOMISED STUDY

Aims of Study

Current opinion of treatment of rectocele advocates surgery. Gynecologists have treated rectocele with vaginal posterior colporrhaphy for over a century whereas coloproctologists use transanal route. Colorectal surgeons have focused on improvement of bowel function and gynecologists to restoration of anatomy when assessing results of rectocele repair. We performed a prospective, randomised study focusing on both anatomical results and relieve of symptoms.

Methods

Thirty women, 15 in both groups, with symptomatic rectoceles not responding to conservative treatment were enrolled in the study. Patients with compromised anal sphincter function or other symptomatic genital prolapse were excluded from the study.All the patients reported bowel symptoms for a two-week period, underwent interview with a standardised questionnaire, clinical examination as recommended by International Continence Society, colon-transit study, defecography and anorectal manometry both preoperatively and 12 months after surgery. Posterior colporrhaphy without plication of levator ani was performed by the same gynecologists and transanal surgery by an experienced coloproctologist. No concurrent operations were performed except treatment of enterocele in two patients undergoing vaginal surgery. Independent samples t-test was used for continuous data between the study groups and paired samples t-test to study differences between preoperative and follow-up measurements. Chi-square or Fisher's exact tests were used for nominal or ordinal data and Wilcoxon signed rank test for differences between preoperative and follow-up symptoms.

Results

No significant differences were found preoperatively between the groups concerning demographic factors, previous operations or preoperative symptoms. Important outcomes are listed in Table 1.

Table 1. Pre- and postoperative data of the 30 patients operated on for symptomatic rectocele.

	Vaginal surgery n=15	Transanal surgery n=15	p-value
Depth of rectocele in defecography (cm)			
Preoperative	6.0±1.6 (3.0-8.0)	5.6±1.8 (3.0-8.5)	0.53
Follow-up	2.73±1.87 (0-6.0)	4.13±2.10 (0-9.0)	0.06
p*-value	0.000	0.07	
Value of point Ap			
Preoperative	-0.10±0.74 (-1-1)	-0.03±0.67 (-1-1)	0.29
Follow-up	-2.8±0.56 (-3- -1)	-1.36±1.12 (-3-0)	0.01
p*-value	p*=0.000	p*=0.000	
Digitation			
Preoperative	11 (73)	10 (66)	
Follow-up	1 (7)	4 (27)	0.17
p*-value	0.01	0.02	
Improvement of symptoms	14 (93)	11 (73)	0.08
Posterior vaginal wall prolapse (all)	1 (7)	10 (67)	0.01
Rectocele	1	6	0.04
Enterocele	0	4	0.05

Values are mean±sd (range) or n (%)
p*-value=paired samples t-test or Wilcoxon signed rank test, when appropriate, for the differences between the preoperative and follow-up measurements.

Mean anal resting pressure -values did not differ between the groups, but values for transanal group were statistically significantly lower at follow-up compared to preoperative situation. Four patients (27 %) reported gas incontinence in transanal group whereas none in vaginal group, but the difference does not reach statistical significance (p=0.057). Six patients in vaginal and two in transanal group reported improvement of sexual life at follow-up; none reported *de novo* dyspareunia.

Conclusions

Improvement of symptoms and restoration of anatomy was seen in both groups. Vaginal approach showed superior results when assessed by clinical examination. In this study, transanal technique predisposed to recurrent rectocele and *de novo* enterocele. No adverse effects on sexual life were found. Transanal approach may compromise anal sphincter function.