

VAGINAL REPAIR OF CYSTOCELE: A COMPARISON OF TRADITIONAL ANTERIOR COLPORRAPHY WITH AND WITHOUT CONCOMITANT USE OF A BIOLOGIC GRAFT

Hypothesis / aims of study

Traditional anterior colporrhaphy is the most commonly performed procedure for cystocele repair despite high rates of cystocele recurrence. Dissatisfaction with this technique has resulted in an increased use of bio-materials to obtain better results. The aim of this study was to investigate anatomical outcomes of traditional pubocervical fascia plication with and without porcine graft augmentation.

Study design, materials and methods

A retrospective cohort study was performed comparing patients who underwent anterior colporrhaphy with a porcine dermal graft augmentation (group 1) and a matched group of patients who underwent anterior colporrhaphy alone (group 2). Group 1 underwent graft augmented surgical repair by Perigee® (American Medical Systems, Minnetonka, MN) using non cross-linked biologic Intexen®.

Patients in the control group were matched according to age, prolapse stage, BMI, parity, concurrent hysterectomy, recurrent or primary cystocele and previous sling procedures. Anatomical outcomes were evaluated by the POP-Q and Baden-Walker classification systems. Recurrences were defined as \geq grade 2 cystocele or point Ba \geq -1. Statistical analysis was performed using the student t-test, Chi-square and Fisher exact tests as appropriate.

Results

A total of 88 patients met the inclusion criteria for the study: 36 patients underwent Perigee® with Intexen graft over standard fascial plication (group 1); 52 patients underwent anterior colporrhaphy alone (group 2). No significant differences were identified between groups regarding patient characteristics and prolapse severity at baseline (POP-Q and Baden-Walker). There was no significant difference in individual POP-Q points between the groups (Table 1). A higher anatomic failure rate was observed in the traditional repair group (17/52, 32.7%) compared with the grafted group (5/36, 13.9%), $p < 0.05$. A low surgical reintervention rate for recurrent anterior wall prolapse was seen in both groups (0%, 0/36 in group 1 vs 3.8%, 2/52 in group 2).

Interpretation of results

Although no difference in individual POP-Q points were noted in the grafted and non-grafted groups, a higher anatomic failure rate was present in the traditional repair group.

Concluding message

The use of biologic graft augmentation provides improved anatomic outcomes over traditional anterior colporrhaphy for anterior wall prolapse.

Table 1: Pre and Postoperative POP-Q points for Groups 1 and 2

	Colporrhaphy and graft Group 1 mean \pm SD	Colporrhaphy Group 2 mean \pm SD	p-value
PRE-OP			
Aa	0.8 \pm 0.2	0.9 \pm 0.2	0.95
Ba	1.4 \pm 0.4	1.2 \pm 0.3	0.5
C	-5.4 \pm 0.8	-4.0 \pm 0.6	0.15
POST-OP			
Aa	-2.3 \pm 0.2	-1.5 \pm 0.3	0.08
Ba	-2.2 \pm 0.2	-1.5 \pm 0.2	0.08

C	-6.8 ± 0.6	-6.9 ± 0.3	0.9
Ba ≥ -1(%)	13.9	32.7	<0.05

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<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Institutional Review Board (Cleveland Clinic Florida)
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No