

DOES PROSTHETIC AUGMENTATION IMPROVES THE ANATOMICAL OUTCOME OF RECTO-VAGINAL SEPTUM RECONSTRUCTION? A RETROSPECTIVE COMPARATIVE ANALYSIS

Hypothesis / aims of study

The anatomical outcomes of posterior vaginal wall reconstruction have been reported between 76% and 96%[1]. A similar wide range of results has been observed with the fascial site specific approach. To reduce the anatomical failure rate the adoption of prosthetic materials has been advocated. A systematic posterior fascial reconstruction, taking into account all the crucial area of fascial insertion, has also been proposed and defined as the recto-vaginal septum reconstruction.

Aim of this study was to retrospectively assess whether if reinforcing the recto-vaginal septum reconstruction could further improve anatomical outcomes of this surgery.

Study design, materials and methods

Clinical records of women undergoing a recto-vaginal septum reconstruction with native tissues or with the adjunct of prosthetic material from May 2000 and April 2008 were reviewed. Preoperative data and length of follow-up were analysed between the groups to verify whether if they were comparable. Then perioperative morbidity as well as recurrence of posterior vaginal wall descent (HWS $\geq 2^{nd}$) between groups were compared. A value of $p < .05$ was considered significant.

Results

The records of 118 women presented complete information concerning the preoperative anatomical assessment and were selected for this study. The average age was 65.7 years (range 40-88) and the Body Mass Index was 27.2 (\pm SD 4.4). The mean follow-up was 26 months (\pm SD 18). Forty-nine women underwent a native recto-vaginal septum reconstruction (group 1) and 69 had the reconstruction reinforced with prosthetic material (group 2) (synthetic in 25 cases and biologic in 44 cases). Table 1 shows that the two groups were comparable.

Table 1: Comparison of preoperative data between Group 1 and 2

Data	Group 1	Group2	Value of p
Age (\pm SD)	65.3 (10.2)	66.0 (9.8)	n.s.*
BMI (\pm SD)	27.6 (4.0)	26.9 (4.6)	n.s.*
Previous Pelvic surgery	46.9%	49.3%	n.s. §
Severe Posterior Prolapse (HWS $>2^{nd}$)	36.6%	37.7%	n.s. §
Follow -up	26.0 (16.8)	21.9 (18.7)	n.s.*

*Two tailed t-student test; §Fisher's exact test

In Table 2 perioperative morbidity is reported:

Table 2: perioperative morbidity in groups 1 and 2

Data	Group 1	Group2	Value of p
Perioperative complications	1/31 (3.13%)	3/38(7.32%)	n.s.§
Δ Hb (\pm SD)	1.8 (0.8)	2.1 (0.8)	n.s.*
Hyperpyrexia ($> 38^{\circ}\text{C}$)	20%	20.8%	n.s.§

§Fisher's exact test; *Two tailed t-student test

Two recurrences (4.4%) were observed in group 1 and 5 (11.1%) in group 2 ($p=n.s.$). In both groups two women underwent a redo surgery.

Interpretation of results

The retrospective nature of this study represents its major bias. Another bias could be represented by the different type of mesh adopted in the mesh augmented group. Taking these bias into account our comparison between a native recto-vaginal reconstruction and the same approach reinforced with a prosthetic material shows, at a relevant follow-up, no statistically significant differences in terms of perioperative morbidity and recurrence rate. Also the rate of redo surgery is similar between the two groups.

Concluding message

In a retrospective data analysis the augmentation with prosthetic material of the recto-vaginal septum reconstruction gives no advantages in anatomical posterior vaginal wall restoration.

References

1. Cundiff GW, Weidner AC, Visco AG, Addison WA, Bump RC. An anatomic and functional assessment of the discrete defect rectocele repair. Am J Obstet Gynecol. 1998 Dec;179(6 Pt 1):1451-6; discussion 1456-7

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Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	It is a retrospective chart review study.
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No

