

ABSTRACT 626

Hypothesis / aims of study

Assess POP-Q before and after posterior colporrhaphy. Compare to post-operative anatomy to healthy volunteers.

The Null hypothesis states that there is no difference in POP-Q before or after prolapse surgery or in healthy volunteers.

Study design, materials and methods

The study was performed with Ethical and HRA approval (IRAS 17/LO/1398). POP-Q was done on patients before and after prolapse surgery (paired data). The post-op data was compared to controls (healthy volunteers). Wilcoxon Signed Ranks test was used to compare.

Results

Seventy-five patients had prolapse surgery. Fifty-eight patients underwent a posterior repair. Interpretation of results

The Null hypothesis was rejected. Post-operatively, the POP-Q TVL is shorter, the POP-Q PB is larger than controls and the POP-Q GH remains larger. POP-Q GH is associated with prolapse and recurrence after operative repair. POP-Q TVL remaining shorter after surgery, compared to the control group could have more than one explanation.

Concluding message

Native tissue posterior colporrhaphy significantly changes the vaginal anatomy towards normality.

INTRODUCTION

Vaginal prolapse is a common condition that occurs when the tissues that support the vagina are compromised. This can cause a variety of symptoms, including a feeling of fullness or pressure in the vagina, difficulty with urination or bowel movements, and pain during sex.

Previous studies focus on recurrence and post-operative correction of prolapse. In this study, pre-operative and post-operative POP-Q anatomy was compared to a normal control group. This study investigated whether vaginal anatomy reverts to normal after prolapse surgery.

The POP-Q PB was previously been shown to be similar in patients with and without prolapse (Digesu 2005; Asfour 2019).

METHODS AND MATERIALS

This study included 97 patients: 75 women who had undergone prolapse surgery and 22 control patients. The women were evaluated before and after surgery using the POP-Q system (Swift 2006).

The study was performed with Ethical and HRA approval (IRAS 17/LO/1398).

The POP-Q results were compared with Wilcoxon Signed Ranks.

RESULTS

POP-Q	Pre-op (ALL, n=75) Mean, SD (Range)	Post-op (ALL, n=70) Mean, SD (Range)	Sig. WSR Pre-op vs Post-op	Controls (n=22) Mean, SD (Range)	Sig. WSR Post-op vs control
PB	2.56, 1.14 (0.4 – 5)	3.68, 0.87 (2 – 5.5)	<0.0001	2.88, 0.53 (1.5 – 3.5)	0.04
GH	3.88, 1.74 (1 -10)	2.68, 0.89 (1 – 5)	<0.0001	2.07, 0.62 (1 – 3.5)	0.03
TVL	8.55, 2.85 (7 -15)	7.09, 2.60 (3 – 13)	<0.0001	10, 1.65 (8 – 13)	0.001
D	-4.83, 4.21 (-12 – -10)	-6.59, 2.37 (-13 - -3)	0.005	-9.33, 1.50 (-12 - -8)	0.001
Aa	-0.02, 2.82 (-3 - +10)	-2.39, 1.65 (-3 - +6)	<0.0001	-3, 0 (-3 - -3)	0.06
Ba	-0.31, 2.88 (-3 - +10)	-2.48, 1.57 (-3 - +6)	<0.0001	-3, 0 (-3 - -3)	0.06
Ap	-0.32, 2.59 (-3 - +8)	-2.8, 0.62 (-3 – 0)	<0.0001	-3, 0 (-3 - -3)	<0.0001
Bp	-0.78, 2.43 (-3 - +8)	-2.87, 0.46 (-3 - -1)	<0.0001	-3, 0 (-3 - -3)	0.2

Table 1. POP-Q pre-op vs post-op vs controls. (This data was submitted for my MD Thesis to Imperial College).

DISCUSSION

The study found that, while there was some improvement in vaginal anatomy after surgery, it did not completely return to normal. Specifically, the posterior vaginal wall (POP-Q PB) was significantly larger after surgery than in healthy controls. The anterior vaginal wall (POP-Q GH) also remained larger after surgery, but to a lesser extent. The total vaginal length (POP-Q TVL) was shorter after surgery than in controls, but this difference was statistically significant.

The study's findings can help women who are considering surgery for vaginal prolapse make informed decisions about their treatment options. The study's findings can also help doctors to better understand the effects of surgery on vaginal anatomy and function. The study's findings can lead to the development of new treatments for vaginal prolapse that are more effective at restoring vaginal anatomy to normal.

CONCLUSIONS

The study's findings suggest that native tissue posterior colporrhaphy is an effective treatment for vaginal prolapse, but it does not completely restore vaginal anatomy to normal. Further research is needed to investigate the long-term effects of surgery on vaginal anatomy and function.

REFERENCES

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