COMPARING SURGICAL TECHNIQUES OF PELVIC ORGAN PROLAPSE RECURRENCE

del Amo E[1], Hernández J[1], Fernández L[1], Roura C[1], Aran I[1], Bergueiro A[1]

Department of Gynecology, Hospital del Mar, Universitat Pompeu Fabra
Barcelona, Spain

Introduction

The aim of this study was to compare two surgical techniques: vaginal hysterectomy versus hysteropexy with women at risk for anatomical recurrent pelvic organ prolapse (POP)

Methodology

The trial was conducted between 2010 to 2015. Women with symptomatic uterovaginal prolapse POP-Q stage ≥ 2 in at least one compartment requiring surgery who attended the pelvic floor clinic of our hospital were recruited. Patients with co-existing concomitant incontinence surgery were included.
Women with language barriers, neoplasms, autoimmune or hematological diseases, abnormal uterine bleeding, and ultrasound uterine/ovarian findings were excluded.
All participants signed a consent form, the study was approved by the Ethics Committee of our hospital.
Follow-up visits were made at 12, 36, and 60 months. In all the visits gynecological examination, POP-Q, and ultrasound were performed and validated QoL surveys were answered.

Two surgery groups were designated by computer-generated randomized table:

1. Vaginal hysterectomy with anterior vaginal colporrhaphy and perineal body repair with Vicryl stitch
2. Hysteropexy with TFS® mesh to arcus tendinous, parametrium and uterosacral, anterior vaginal colporrhaphy, and perineal body repair with Vicryl stitch.

Posterior vaginal colporrhaphy was performed when appropriate, and suburethral/TVT mesh was applied to correct stress urinary incontinence if appropriate.
We do not show in this abstract the validated QoL survey results.

The primary outcome measure was POP anatomical recurrence at 12, 36, and 60 months. We considered POP anatomical recurrence when the POP-Q stage was ≥ 2.

The secondary outcome considered whether the percentage of recurrences changed over time at 12, 36, and 60 months. Also as the secondary outcome, we analyzed if the urogenital hiatus area to the Valsalva > 25 cm 2 is able to play a role in the POP recurrence

We used the X2 test, Fisher's Exact Test and independent t-test, Cochran's Q test, and logistic regression as appropriate, and data were analyzed with the statistical method IMB SPSS Statistics version 26

A final total of 38 patients were included in the hysteropexy group and 32 in the vaginal hysterectomy group.

Results

Figure 1 shows the demographic characteristics of the study patients. Both groups are comparable and homogenous. There are no differences between these groups with respect to the basic variables.
Figure 2 shows the results obtained

INTERPRETATION OF RESULTS

Analyzing the POP anatomical recurrence at 12, 36, and 60 months, the hazard of recurrence seemed the largest when a hysterectomy is performed, however, there was no statistically significant difference between surgical techniques (Figure 2).
There was no difference in POP anatomical recurrence over time between prolapse repair with hysteropexy or vaginal hysterectomy (p-value Cochran's Q test =0.307).
Logistic regression analysis identifies hiatus area > 25 cm2 at 12 months as a predictor (or risk factor) of POP anatomical recurrence.
The multivariate analyses were adjusted for age at the surgery, body mass index and surgical techniques and OR = 3.55 (95% CI 1.12-11.24).

	Hysteropexy n=38	Hysterectomy n=32	p value
Age, mean (SD),y	62.32 (8.31)	63.56 (9.87)	0.574 [a]
Age first delivery	25 (3.72)	26.03 (4.32)	0.290 [a]
BMI, mean (SD)	26.64 (3.19)	28.89 (5.48)	0.046 [a]
Postmenopausal nº/total (%)	31 (81.6)	25 (78.1)	0.719 [b]
Current smoker nº/total (%)	1 (2.6)	1 (3.1)	1 [c]
Stress urinary Incontinence Nº/total (%)	13 (34.2)	7 (21.9)	0.255 [b]
Presurgical POP-Q stage			0.602 [b]
2	19 (50)	14 (43.8)	
3	19 (50)	18 (56.3)	
Nº/total (%)			

a: T-Test
b: Chi-square Test
c: Fisher's Exact Test

Figure 1

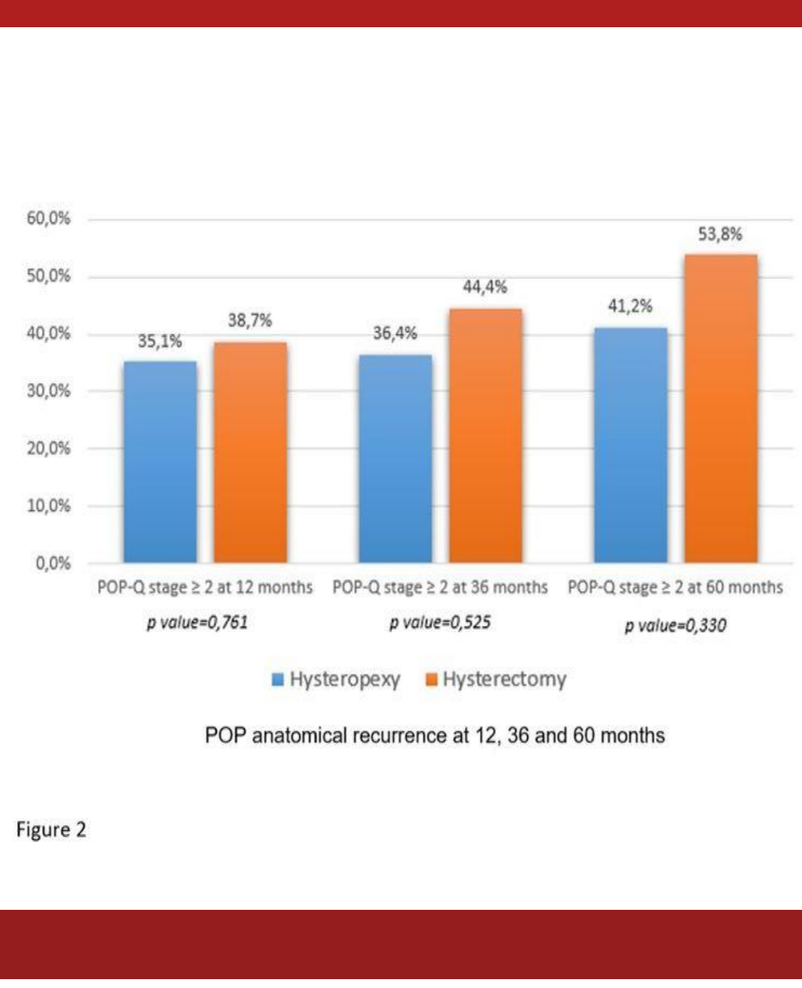

Figure 2

Conclusion

In our study, the hazard of anatomical recurrence over time showed no significant differences between vaginal hysterectomy and hysteropexy techniques.
The one significant finding was that the hiatus area at Valsalva, at 12 months, when greater than 25 cm2 had a 3.56 times greater risk of POP recurrence.

DISCLOSURES

Funding no funding **Clinical Trial** Yes **Public Registry** No **RCT** Yes **Subjects** Human **Ethics Committee** Comité de Ética del Parc de Salut Mar, Barcelona, Spain **Helsinki** Yes **Informed Consent** Yes.