

## PUBLIC HOSPITAL SURGICAL APPROACH AND RECURRENCE OF POPQ STAGE IV PELVIC ORGAN PROLAPSE (POP) IN A DEVELOPING COUNTRY: ANOTHER FORM OF MANAGEMENT IS POSSIBLE

### Aims of study

The recurrence rate of POP surgeries are directly associated to the preoperative severity of the disease. The most severe presentation is stage IV in POPQ quantification. There are several surgical techniques for this type of POP. The approach of this stage is more challenging in developing countries mainly for the lack of resources, what is most evident in the public administration hospitals. This situation leads to avoidance advanced surgeries and only performs traditional surgeries like vaginal hysterectomy (VH) plus anterior and posterior colporrhaphy, with high recurrence rate.

The aim of this abstract is to present a public hospital surgical approach to POPQ stage IV POP in a developing country, as a different model than the traditional one. We report epidemiological features, type of surgery, surgical results, intraoperative - perioperative complications, postoperative recurrence, mesh erosion, subjective surgery satisfaction and change in quality of life (QoL).

### Study design, materials and methods

This is a retrospective cohort of patients with POPQ stage IV POP who underwent surgery between January 2008 to December 2009.

Data of patients were obtained from hospital database by a search for the preoperative POPQ staging. Case notes were reviewed to obtain information like demographics, symptoms, gynaecological exam (including POPQ quantification), follow-up at 3 weeks, 6 weeks, 3 months, 6 months, 1 year and then yearly. Recurrence was defined as stage II or higher in POPQ. Three months after surgery and then in every visit, patients were asked for surgery satisfaction and subjective change in QoL. Methods, definitions and units conform to the standards jointly recommended by the International Continence Society and the International Urogynecological Association, except where specifically noted.

All the surgeries were performed by urogynecology unit surgeons. Informed written consent was obtained from the clinical patients to perform the surgery.

### Results

Between January 2008 to December 2009 746 new patients were evaluated in the ambulatory urogynecology unit and in the same period 309 surgeries were performed. Thirty-two of them were for POPQ stage IV diagnosis. Demographic details including comorbidities and previous gynaecological surgeries are shown in Table 1.

Table 1 Demographic data

Demographic Data	
Mean age±SD, range/mode (years)	67±9, 49-84/68
Median total parity±SD, range/mode	4,4±3,7, 0-18/3
Median Vaginal spontaneous birth±SD, range/mode	4,1±3,8, 0-18/3
Median heaviest newborn weight±SD, range/mode (grams)	3775±582, 3000-5000/3500
Median menopause age±SD, mode (years)	49±5,5, 50
Mean BMI±SD, range (kg/m <sup>2</sup> )	27,2±3, 22-32
Previous gynaecological surgeries	
POP VH with or without anterior or posterior colporrhaphy	5
Non POP Abdominal hysterectomy	2
Other procedures	4

VH: Vaginal Hysterectomy

Eighteen patients were staged as IVC, thirteen IVa and one as IVp in POPQ classification.

The average general POPQ is shown in table 2:

	Aa±SD	Ba±SD	C±SD	TVL±SD	Ap±SD	Bp±SD	D±SD
General POPQ	2,6±1,1	5,3±1,7	5,8±2,1	8,4±0,9	1,2±1,9	2,7±2,7	-0,9±1,4
Mode	3	6	5	9	3	-1	0
Min	-3	0	1	6	-3	-3	-4
Max	3	9	9	10	3	8	0

### Surgical details:

Surgical techniques are detailed in table 3

Table 3

Technique	n
Labhardt Colpoperineocleisis (LC)	14 <sup>1</sup>
Abdominal Colposacropexy (CS)	10 <sup>2</sup>
Total Prolift (TP)	8 <sup>3</sup>

<sup>1</sup> One concomitant VH <sup>2</sup> Six concomitant subtotal hysterectomy, two total hysterectomy <sup>3</sup> Two concomitant TOT  
 Perioperative data are shown in table 4.

Table 4

Perioperative Data	LC	CS	TP
Mean operating time±SD (min)	57,1±17,8	115,5±15,5	90,6±15,2
Mean Estimated blood loss±SD (ml)	59,2±39,9	102,5±88,3	61,2 ± 33,6
Intraoperative complications	0	0	0
Median hospital stay±SD (days)	2,2±0,9	2,9±1	2,1±0,3

Follow-up:

Follow-up details are shown in table 5

Follow-Up Details	General (%)	LC (%)	CS (%)	TP (%)
Mean follow-up±SD (month)	7,1±5,3	6,8±5,2	6,2±5,9	8,7±5,1
Recurrence	8 (25)	1 (7,1)	5 <sup>4</sup> (50)	2 <sup>5</sup> (25)
Post operative events	10 (31,3)	4 <sup>6</sup> (28,6)	4 <sup>7</sup> (40)	2 <sup>8</sup> (25)
Mesh Erosion	3 (37,5)	n/a	0	3 (37,5)
Surgery Satisfaction	26 <sup>9</sup> (81,2)	12 (100)	6 (100)	8 (100)
Improve in QoL	26 <sup>9</sup> (81,2)	12 (100)	6 (100)	8 (100)

n/a: Not Applicable SUI: Stress Urinary incontinence <sup>4</sup>All recurrence were asymptomatic. <sup>5</sup>Both were hypertrophic cervix elongation not diagnosed in preoperative evaluation. <sup>6</sup>Two SUI (one persistent, one de novo), one colpoperineorrhaphy dehiscence, one PDS extrusion. <sup>7</sup>One De novo urgency, one de novo SUI, one seroma, one mild dyspareunia. <sup>8</sup>Two de Novo SUI. <sup>9</sup> Only 26 patients responded to the questionnaire (LC: 12, CS: 6, TP: 8)

#### Interpretation of results

In all patients was remarkable the high parity and particularity vaginal deliveries. It's also important that the main affected compartment was apical follow by anterior. In our cohort no patient underwent traditional management. The general recurrence rate was 25%, being higher for CS (50%), lower for LC (7,1%) and intermediate for TP (25%) for patients with stage IV POP, but still lower than traditional management. The techniques used in our unit have a low intraoperative and postoperative complication rate. The satisfaction of patients and improvement in the quality of life are excellent (81.2% of patients answered the questionnaire, showing satisfaction with surgery and improvement in quality of life in all of them). Despite this, the erosion rate for TP in these patients (37,5%), is larger than those described in the literature.

#### Concluding message

The evaluation of stage IV POPQ POP patients and surgery technique decided by an established urogynecology unit in a developing country can change the surgical approach to the disease. This model of work can be exported to other developing countries, benefiting patients with better assessments, diagnoses and personalized treatments.

#### References

1. Maher, C et al. Cochrane Database Syst Rev. 2007 Jul 18;(3):CD004014.

Specify source of funding or grant	NONE
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	It is a retrospective cohort
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes