1. The Chinese University of Hong Kong

# RECURRENCE OF PROLAPSE AND QUALITY OF LIFE OF WOMEN AFTER VAGINAL HYSTERECTOMY AND PELVIC FLOOR REPAIR FOR UTERINE PROLAPSE AND PELVIC FLOOR PROLAPSE

# Hypothesis / aims of study

Reviewing the outcome of women after the commonly performed procedure, vaginal hysterectomy and pelvic floor repair (VHPFR), is important in counselling women. The aim of this study is to evaluate the recurrence of prolapse base on patient reported outcomes and anatomical findings.

# Study design, materials and methods

Women who received VHPFR for uterine prolapse and pelvic floor prolapse in a tertiary unit 2 or more years from this study were followed up. Generally, women who had stage I or II prolapse would receive VHPFR. If they had stage III or more of uterine prolapse, they would also receive sacrospinous ligament fixation (SSLF); women who had urodynamic stress incontinence would also receive concomitant surgery (tension free transobturator tape). Demographic data were collected. They were asked to fill in Pelvic Floor Distress Inventory (PFDI) and Pelvic Floor Impact Questionnaire (PFIQ), followed by being examined for any prolapse according to Pelvic Organ Prolapse Quantification System (POP-Q). Report of 'yes' to question 4 and/or 5 of PFDI were regarded as having symptoms of prolapse. And POP-Q stage II or above is regarded as anatomical recurrence of prolapse. Their health-related quality of life was analysed.

#### Results

In all, 240 women completed the study; and 10% had ≥stage III prolapse before the VHPFR (table 1). 26.3% had received concomitant tension free transobturator tape surgery. The mean interval between surgery and the follow-up was 3.9 years. Overall, 31% reported symptoms of prolapse and 49% had anatomical recurrence of prolapse. The most commonly involved compartment was anterior compartment. There was no difference in recurrence of prolapse between women with or without concomitant continence surgery. Pre-operative stage III or more prolapse was associated with a higher rate of anatomical recurrence of prolapse (16 (13.7%) vs 7 (5.7%), P = 0.036), but not with reported symptoms of prolapse (7 (9.3%) vs 16 (9.7%), P = 0.93). This was also associated with more recurrence of middle compartment prolapse (6 (30%) vs 17 (7.7%), P = 0.002). The PFDI scores and POPIQ scores were higher in women reported symptoms of prolapse when compared with those who did not report the symptoms. However, only CRADI score was higher in women found to have anatomical difference when compared with those without.

# Interpretation of results

At a mean of 3.9 years follow-up, 31% of women reported symptoms of prolapse after VHPFR. Their PFDI scores and POPIQ score were higher when compared with those who did not report the symptoms. Anatomical recurrence was found in 49% of women, with anterior compartment being the most common recurrence compartment. Pre-operative prolapse of stage III or more was associated with a higher rate of recurrence of overall anatomical prolapse and middle compartment prolapse.

### Concluding message

31% of women reported symptoms of prolapse after VHPFR. Their health-related quality of life was affected. Pre-operative prolapse of stage III or more was associated with more recurrence of overall anatomical prolapse and middle compartment prolapse, despite an addition of SSLF. Concomitant tension-free transobturator tape was not associated with recurrence of prolapse.

Table 1. Data on demographics and recurrence of prolapse according to symptoms and POP-Q assessment

	All		
	(N = 240)		
Age at surgery (years)	61.2 (8.6)		
Parity	3.2 (1.5)		
Pre-operation ≥ stage III prolapse	23 (9.6%)		
Current age (years)	65.1 (8.7)		
Current BMI (kg/m²)	25.2 (3.7)		
Interval from surgery (years)	3.9 (1.9)		
Recurrence of prolapse			
Symptoms of prolapse	75 (31.3%)		
According to POP-Q (≥Stage II)			
<ul> <li>Anterior compartment</li> </ul>	108 (45.0%)		
<ul> <li>Middle compartment</li> </ul>	20 (8.3%)		
<ul> <li>Posterior compartment</li> </ul>	11 (4.6%)		
Overall	117 (48.8%)		

Values are presented in mean (standard deviation) or number (percentage)

Table 2. The PFDI and PFIQ scores between women with or without recurrence of prolapse

	Symptoms of prolapse		P-value	Anatomical recurrence		P-value
	No	Yes		No	Yes	
<u>PFDI</u>	(n = 225)	(n = 75)		(n = 123)	(n = 117)	
POPDI	12.5 (35.7)	31.3 (51.8)	< 0.005	12.5 (36.9)	23.8 (40.8)	0.29
UDI	12.5 (27.1)	30.4 (34.3)	< 0.005	13.2 (31.6)	7.7 (15.4)	0.55
CRADI	17.9 (37.6)	26.3 (43.3)	0.007	17.5 (35.2)	25.0 (47.3)	0.04
<u>PFIQ</u>						
POPIQ	0 (0)	0 (5.2)	0.013	0 (0)	0 (0)	0.21
UIQ	4.2 (15.3)	5.6 (22.2)	0.23	4.2 (15.3)	5.6 (22.0)	0.67
CRAIQ	0 (0)	0 (0)	0.86	0 (0)	0 (0)	0.79

Values are presented in median (interquartile range)

<u>Disclosures</u> **Funding:** NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Joint Chinese University of Hong Kong - New Territories East Cluster Clinical Research Ethics Committee **Helsinki:** Yes **Informed Consent:** Yes