

POPQ STAGING AND QUALITY OF LIFE IN WOMEN WITH VAGINAL PROLAPSE

Hypothesis / aims of study

The primary aim was to determine the correlation between the POPQ stage and Quality of Life (QoL) using a validated questionnaire in women presenting for surgical management of vaginal prolapse. The secondary aim was to evaluate alternatives to POPQ staging to establish if this correlation could be improved.

Study design, materials and methods

Preoperative QoL and POPQ staging data for all 45 women enrolled in a clinical trial of surgical management of anterior compartment vaginal prolapse are presented. QoL was determined using the PQOL questionnaire. (1) The booking gynaecologist performed POPQ staging (2) at the same consultation as the questionnaire was completed. Because there was no apparent correlation between the POPQ stage of the prolapse of the anterior, middle or posterior compartment and QoL further analysis was undertaken. The correlation between the most distal point of the prolapse in each compartment and QoL was measured. A final analysis was undertaken in which the prolapse was classified as mild or severe as determined by the most distal location of the prolapse. Initially, mild prolapse was defined as the most distal part presenting at the hymenal remnant. The process was reiterated in increments of 1cm beyond the hymenal remnant to redefine the mild and severe categories until the best fit of data correlating severity and QoL were obtained. Statistical analysis was by Spearman correlation (Graph Pad Prism for Mac OS X) unless otherwise stated.

All participants gave informed consent.

Results

Table 1: POPQ stages for each compartment in 45 women presenting for surgical management of anterior compartment prolapse.

Compartment	Stage 0	Stage 1	Stage 2	Stage 3	Stage 4
Anterior	0	0	26	19	0
Middle	21	8	14	1	1
Posterior	11	13	21	0	0

Table 2. Quality of Life and Spearman correlation coefficients for PQOL domains and highest POPQ stage of the prolapse.

Domain	Median (interquartile range)	Correlation with stage of prolapse (p value)	Domain	Median (interquartile range)	Correlation with stage of prolapse (p value)
General Health	25 (6-25)	0.17 (0.28)	Personal Relations	50 (4-83)	-0.36 (0.11)
Life Affect	67 (33-100)	0.08 (0.59)	Emotions	33 (14-66)	0.08 (0.59)
Role Limitations	32 (0-66)	0.23 (0.13)	Sleep and Energy	33 (20-66)	0.28 (0.07)
Physical and Social Limitations	23 (7-52)	0.12 (0.42)	Severity Measures	25 (16-48)	0.21 (0.17)

There was no significant correlation between the highest POPQ stage of the prolapse of any compartment and any of the eight domains of the PQOL questionnaire (Table 2). Similarly, no significant correlation was identified between the cardinal POPQ evaluation and PQOL (data not shown).

Table 3. Correlation between QoL parameters and anatomical severity of the prolapse (categorised as mild or severe) in 45 women presenting for prolapse repair. The maximal distance of the most distal point in relation to the hymenal ring has determined the category. In Column 2 mild is at the hymenal ring (n=11) and severe (n=34) beyond. In Column 4 mild is up to 1cm beyond the hymenal ring (n=25), in Column 6 mild is up to 2cm beyond the hymenal ring (n=37), in Column 8 mild is up to 3cm beyond the hymenal ring (n=40).

Domain	≤0cm	p value	≤1cm	p value	≤2cm	p value	≤3cm	p value
General Health	0.05	0.73	0.09	0.53	0.36	0.01*	0.20	0.17
Life Affect	0.06	0.66	0.01	0.91	0.28	0.05*	0.07	0.63
Role Limitations	0.11	0.46	0.24	0.11	0.28	0.05*	0.12	0.40
Physical and Social Limitations	0.13	0.39	0.06	0.65	0.28	0.05*	0.01	0.95
Personal Relations	-0.17	0.46	-0.45	0.04*	-0.01	0.95	-0.01	0.95
Emotions	0.04	0.78	0.01	0.90	0.29	0.05*	0.04	0.75
Sleep and Energy	0.38	0.01*	0.10	0.50	0.22	0.13	0.13	0.38

Severity Measures	0.24	0.10	0.09	0.52	0.24	0.11	0.02	0.85
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Interpretation of results

Although the QoL domains are measuring an adverse effect of the prolapse there is no consistent correlation between the degree of anatomical defect as assessed clinically and QoL as assessed by the PQOL questionnaire until such time as the most distal part of the prolapse is more than 2cm beyond the hymenal ring. Even then the correlation between the anatomical severity of the prolapse and QoL is weak.

Concluding message

POPQ staging of prolapse does not relate well to function. Gynaecologists are encouraged to include QoL parameters in addition to anatomical parameters in the routine evaluation of outcome of treatments of prolapse.

References

1. Digesu GA, Khullar V, Cardozo L, Robinson D, Salvatore S. P-QOL: a validated questionnaire to assess the symptoms and quality of life of women with urogenital prolapse. *Int Urogynecol J Pelvic Floor Dysfunct.* 2005 May-Jun;16(3):176-81
2. Bump RC, Mattiasson A, Bø K, Brubaker LP, DeLancey JO, Klarskov P, Shull BL, Smith AR.: The standardization of terminology of female pelvic organ prolapse and pelvic floor dysfunction. *Am J Obstet Gynecol* 1996;175:10-17

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<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>Is this a Randomised Controlled Trial (RCT)?</i>	Yes
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Ethics Committee of the Central Northern Adelaide Health Service
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes