Evaluation Of Female Sexual Dysfunction Post Reconstructive Pelvic Organ Prolapse Surgery Using Vaginal Native Tissue Repair (Abstract #491)



Alramsi E¹, Alzaabi M², Elredy M², Fadda M², Sultan S²



1. SEHA, 2. Sheikh Shakbout Medical City

HYPOTHESIS / AIMS OF STUDY

Sexual dysfunction is common in women of childbearing age, leading to physical and emotional distress and negatively impacting a woman's social, physical, and psychological well-being. (1) Simple tools have been designed to assess the impact of pelvic floor disorders (PFD) on women's sexual health. However, no studies were found to assess that in our facility.

This study examines the effects of Reconstructive Pelvic Organ Prolapse (POP) Surgery Using Vaginal Native Tissue Repair on female sexual dysfunction. In addition, it assesses the comparisons of sexual function on the type of surgery performed, POP stage, and type of incontinence. Furthermore, the study investigated the relationship between age, body mass index (BMI), and menopausal state with sexual function.

STUDY DESIGN, MATERIALS and METHODS

This is a retrospective cross-sectional, questionnaire-based study with 52 respondents using the pre-validated Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ-12) to assess sexual function in three domains: behavioral-emotive (items 1-4), physical (items 5-9), and partner-related (items 10-12). (2) responses are graded on a five-point Likert scale ranging from 0 (always) to 4 (never). Items 1-4 are reversely scored, and a total of 48 is the maximum score. Higher scores indicate better sexual function. (2)

All women who underwent corrective surgery for POP or stress urinary incontinence (SUI) between 1 January 2020 and 30 December 2021 in our facility were recruited. The participants were required to be sexually active before and after surgery and to have a good comprehension of verbal and written English or Arabic. Women with active malignant tumors, any terminal illness, or incurable disease were excluded. Besides, those with incomplete information regarding sexual function before surgery. The subjects had a thorough history and physical examination at baseline. The baseline data were age, BMI, menopause status, parity, past prolapse surgery, prior hysterectomy, and tobacco usage. Women who were sexually active following surgery were evaluated to examine changes in overall and question-specific outcomes. The responses were graded using a Likert scale, while SPSS analyzed the findings.

RESULTS

Most participants belonged to the age 41-50 (55.8%), followed by those 31-40 (19.2%). Respondents 51-60 were 15.4%, while those above 60 were 9.6%. The study collected BMI data where most participants were obese (51.9%), followed by overweight (30.8%). Those with normal weight were 15.4%, while the fewest were underweight (1.9%). The study mostly largely incorporated Arab residents (98.1%) with only non-Arabs being 1.9%. Almost all participants were non-smokers (98.1%), with smokers being 1.9%. The largest proportion of the participants was in the pre-menopause stage (69.2%), while those in the post-menopause stage were 17.3%. Most participants gave birth more than six times (67.3%), followed by those who had given birth five times (13.5%). The parity of the rest of the respondents was less than 10%. Considering chronic diseases, most participants had none (48.1%). Diabetes was the most reported disease (19.2%), followed by chronic constipation (15.4%), hypertension (13.5%), chronic cough and asthma (13.5%).

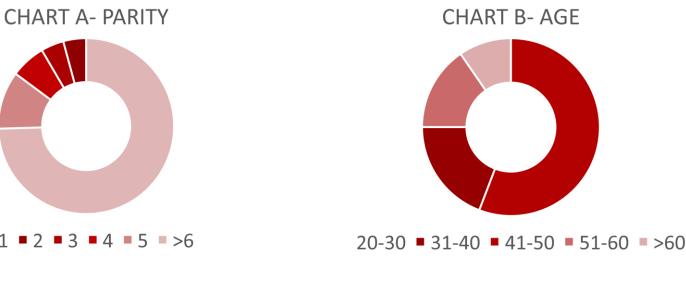
In addition, the participants reported their previous surgical history. 11% had undergone POP surgery and continence surgery. A small percentage had undergone hysterectomy (1.9%). Some had undergone surgeries other than pelvic, and a majority had not undergone any previous surgery (46.2%). Regarding the type of incontinence, most participants had pure stress (61.5%), followed by those with mixed urinary incontinence (UI) (25%). The least proportion did not report any incontinence (13.5%). 34.6% of the participants reported coital UI and dyspareunia. The common POP stage was grade II (61.5%), followed by those in grade III (34.6%). For POP Grade I and IV, only one participant reported in each stage. Most participants had prolapses in the anterior and posterior compartment (55.8%), followed by those in the posterior position (28.8%). Considering the type of surgery performed, most underwent POP and UI surgery (75%). Those who underwent POP surgery were 23.1%, while only one was on UI surgery. Besides, the period after surgery differed. For instance, most participants had stayed 13-18 months since surgery (38.5%), followed by those who stayed 19-24 months (21.2%). Those who stayed 10-12 months were 19.2%, while 4-6 months was 15.4%. Only one person had only lasted three months since surgery.

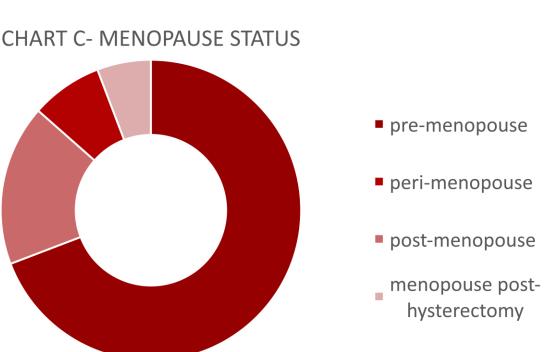
The comparisons of sexual function on the following categories: surgery performed, months after surgery, POP stage, prolapse compartment, and type of incontinence reveal no significant differences among these groups as all p-values were greater than 0.05. ANOVA

The study sought to determine the differences of sexual functions based on surgical history, dyspareunia and coital UI. The results reveal that participants who underwent past surgery had a higher sexual function ($M=38.96\pm5.85$) than who had not (35.22 ± 6.97), t(50)=2.085, p=.042. However, there were no

differences in the mean of sexual functions in women who had dyspareunia and coital UI, and those who had not. Besides, the study investigated the relationship of surgery performed among the various conditions. Table 1 shows significant differences in the surgery performed and other groups namely: POP stage, prolapse compartment, dyspareunia, type of incontinence, and coital UI. Women who underwent POP surgery only did not report a higher sexual function (37.75 ± 7.06) than women who underwent POP and UI surgery (36.95 ± 6.64) , t(49)=-0.36, p=0.72.

Further analysis compares sexual function and age alongside BMI. Age and sexual function exhibited a negative relationship r (52) = -0.083. However, the association is not statistically significant. Similarly, sexual activity reduced with an increase in BMI. However, the results are not statistically significant r (52) = -0.25, p=.074. The study compared sexual function on the menopause status. Women in their pre-menopause stage did not report significantly higher sexual performance (37.72±6.76) than those in their post-menopause phase (35.56±5.48), t(49)=0.889, p=.379. In addition, an independent sample t test showed that sexual functions of women without chronic disease was not significantly higher (M=37.24±6.95) than for those with chronic disease (M=36.81±6.52), t(49)=-0.228, p=.821.





INTERPRETATION OF RESULTS

The overall score on the PISQ-12 for all participants was 37.02 (77.08%) indicating a good sexual function. The findings show no significant differences among the following groups: POP stage, prolapse compartment, and type of incontinence. The result shows that participants who underwent past surgery had a higher sexual function. It further revealed differences in the surgery performed and other groups, namely: POP stage, prolapse compartment, dyspareunia, type of incontinence, and coital UI.

Table - 1

Chi-square of Surgery performed

em square of surgery perjormen			
	X	df	p
POP Stage	52.37	6	<.001
Prolapse Compartment	60.47	10	<.001
Dyspareunia	9.63	2	.008
Type of incontinence	27.6	4	<.001
Coital UI	6.26	2	.044

CONCLUDING MESSAGE

The study revealed that surgery influences the sexual functions of the participants, consistent with previous studies that show the effectiveness of surgery in treating the condition (3).

REFERENCES

- 1. Ko, Kwang Jin, and Kyu-Sung Lee. "Current Surgical Management of Pelvic Organ Prolapse: Strategies for the Improvement of Surgical Outcomes." Investigative and Clinical Urology 60.6 (2019): 413-424.
- 't Hoen LA, Utomo E, Steensma AB, Blok BF, Korfage IJ. The Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ-12): validation of the Dutch version. Int Urogynecol J. 2015 Sep;26(9):1293-303. doi: 10.1007/s00192-015-2692-y. Epub 2015 May 12. PMID: 25963057; PMCID: PMC4545192.
- 3. Abrar, Saida, Raheela Mohsin, and Huda Saleem. "Surgery For Pelvic Organ Prolapse and Stress Urinary Incontinence and Female Sexual Functions: A Quasi-Experimental Study." Pakistan Journal of Medical Sciences 37.4 (2021): 1099.