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Research Article

Assessment of Quality of Life of Women with Genital Prolapse Before and After Surgery in Georgian Population

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Received: July 24, 2019; **Published:** August 08, 2019

Abstract

Introduction: Genital prolapse is not a disease which leads to death of patient, but it causes many limitations in several aspects of life such as physical and social activity, causes many psychological problems in everyday domestic or sexual life and affects heavily quality of life. The aim of our study was to assess how surgical management of this disease can improve the quality of life of women.

Method: For data collection all women were asked to complete a questionnaire in Georgian language to assess how much their symptoms were affecting women's quality of life. The questionnaire was developed according to a Prolapse Quality of Life (P-QOL) Questionnaire. The total scores for each P-QOL domain were compared before and after surgery.

Results: Before surgery the average effect of prolapse on general health perception was found to be 48 and the average effect of prolapse on quality of life was found to be 80. At the lower dimensions of the scale, the average role limitations score was found to be 52, average physical limitations score was 67, average social limitations score was 42, and average personal relations score was 52. The average emotions score was 67, average sleeping/energy score was 42. After surgery average scores for general health perception was 25, for physical limitations 25, average sleeping/energy score was 17. For other parameters scores were defined as zero

Discussion: Our study demonstrates that depressive signs improved significantly after surgery. Improved mental health status could have positive effect on women's quality of life after surgical intervention. The results of our study were fully consistent with the results of previous studies: our research also found that surgery leads to a dramatic improvement not only in depressive symptoms but also in condition-specific quality of life. After surgery, during 3 month recall period progressive improvement in all domains of quality of life have been observed.

Keywords: *Genital Prolapse; Quality of Life Assessment; Surgical Treatment*

Abbreviation

QOL: Quality of Life

Introduction

The genital prolapse is one of the main gynecologic diseases. As many as 38% to 76% of women consulting for routine gynecological care suffer from this condition [1,2]. The strongest risk factor for pelvic organ prolapse is parity, because childbirth can cause damage to the pudendal nerves, fascia, and supporting structures, as well as to the muscle [3]. The associated risk factors include aging, long-term abdominal straining, and connective tissue disorders [4,5].

Management of genital prolapse includes interventions to prevent the disease, non-surgical (conservative) and surgical treatment [6]. Over the last few years, various methodologies and approaches have been suggested for surgical treatment of genital prolapse, some of them became very fast popular, others in contrast lost their actuality [7-10]. Such minimally invasive techniques as for example laparoscopic and robotic surgery are intensively developed in last years and as well as new synthetic and biological grafts are created. Due to these recent advances surgical approach to pelvic organ prolapse treatment has been dramatically changed.

The number of women which have been undergone surgical treatment of genital prolapse is quiet high, according to Olsen., *et al.* this number is eleven percent by the age of 80 [11]. After primary native tissue repair recurrent prolapse rate is significant. In order to reduce recurrence rates various mesh repair methods were suggested. The aim of this approach was natural tissues reinforcement [12,13]. Several studies were made to proof their effectiveness. Conclusion made by Cochrane review in cases where non absorbable meshes were used for soft tissue augmentation, the recurrence rates were significantly lower [14].

Genital prolapse is not a disease which leads to death of patient, but it causes many limitations in several aspects of life such as physical and social activity, causes many psychological problems in everyday domestic or sexual life and affects heavily quality of life [15]. Main signs commonly associated with genital prolapse include dragging sensation, pressure in the vagina or pelvis, constipation. Severity of symptoms defends on severity of disease. Prolapse also can lead to urinary problems (urine leakage and frequent infections), sexual concerns (sensation of looseness, difficulty during coitus) and many other disturbances [16].

Quality of life of women with pelvic prolapse is important issue. Many studies have been performed to assess how it can be improved after various treatments. A recent systematic review and meta-analysis done by Doaee and colleagues demonstrated that QOL of women with pelvic prolapse is significantly improved after surgical treatment [17].

In order to assess the severity of genital prolapse and its effects on quality of life various validated questionnaires are used worldwide. In the United States are approved following 2 questionnaires: The Pelvic Floor Distress Inventory (PFDI) and Pelvic Floor Impact Questionnaire (PFIQ). They are useful condition-specific quality-of-life instruments for women with pelvic organ prolapse. They can be used to access the degree of bother and disruption from common activities, which can be caused by prolapse symptoms [18]. But both these questionnaires are very complex, consisting of many different items (46 and 93 items, respectively). This fact limits their use [19]. In 2005, new, simple, easy to use, easy to understand and reliable questionnaire - P-QOL was created by Digesu., *et al* [20]. P-QOL includes less items, is shorter and is easy to fill compared with other validated questionnaires developed earlier, such as the PFDI and the PFIQ.

Aim of the Study

The aim of our study was to assess using short version of P-QOL questionnaire, how surgical management of this disease can improve the quality of life of women with genital prolapse in Georgian population.

Materials and Methods

Patients were recruited over two years from outpatient service of Department of Gynecology Ltd Amtel Hospital First Clinical Hospital, Tbilisi, Georgia. Study design and data collection was approved by local Ethics Committee of hospital. Written informed consent was obtained from every participant woman.

After application of the exclusion criteria, the study was discussed with 20 symptomatic female patients, with need for surgery (Figure 1).

For data collection all women were asked to complete a questionnaire in Georgian language to assess how much their symptoms were affecting women's quality of life. The questionnaire was developed according to a Prolapse Quality of Life (P-QOL) Questionnaire developed by Digesu and colleagues [20] and included questions related to a particular aspect of quality of life. Questions regarding bladder and bowel were excluded from the questionnaire.

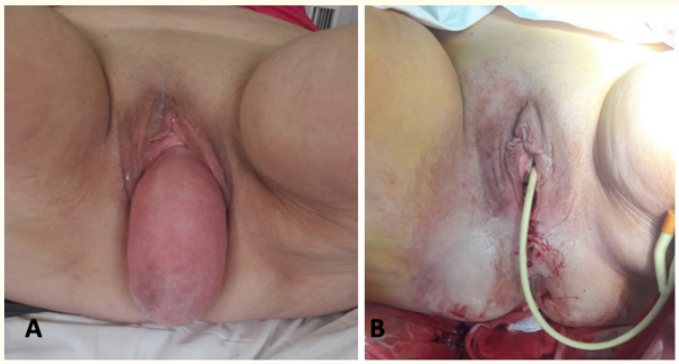

Figure 1*: Clinical case of Complete uterovaginal prolapse with accompanying intramural leiomyoma. Surgical intervention: Colpoperineoplasty and vaginal hysterectomy. A: Before surgery; B: Immediately after surgery.*

In our study we assessed following 8 domains: general health, prolapse impact, role limitations, physical and social limitations, personal relationships, emotional problems, sleep/energy disturbance. Scores in each domain ranged between 0 and 100. A high total score indicates a greater impairment of quality of life, while a low total score indicates a good quality of life. All these questions and all these symptoms were clearly explained to the woman and no women had difficulty understanding the questionnaire, so that they could easy identify the answers. All women completed a questionnaire before the surgical intervention and 3 months after.

The total scores for each P-QOL domain were compared before and after surgery. Data analysis was performed using SPSS software (SPSS Inc., Chicago, USA).

Results and Discussion

The participant women were aged between 34 and 76, mean age was 61. The majority of woman had had vaginal deliveries and at the moment of examination were in postmenopausal period.

Before surgery the average effect of prolapse on general health perception was found to be 48 and the average effect of prolapse on quality of life was found to be 80. At the lower dimensions of the scale, the average role limitations score was found to be 52, average physical limitations score was 67, average social limitations score was 42, and average personal relations score was 52. The average emotions score was 67, average sleeping/energy score was 42. After surgery average scores for general health perception was 25, for physical limitations 25, average sleeping/energy score was 17. For other parameters scores were defined as zero (Table 1).

	Before surgery (mean)	After surgery (mean)	Min. - max.
General health	48	25	0-100
Prolapse impact	80	0	0-100
Role limitation	52	0	0-100
Physical limitation	67	25	0-100
Social limitation	42	0	0-100
Personal relationship	52	0	0-100
Emotion	67	0	0-100
Sleep energy	42	17	0-100

Table 1: *Scores of the P-QOL questionnaire for quality of life domain for symptomatic women before and after surgery.*

Our study demonstrates, after surgical treatment QOL of women with genital prolapse significantly improves. The better QOL scores compared to baseline scores were observed in all 8 domains. Before the surgery, such women with genital prolapse had poor QOL scores.

As we noted above one of main risk factors of genital prolapse is parity and vaginal delivery. So, for us was of great interest to investigate prolapse in the aspect of risk factors. In our study, we demonstrated that 55% of the women had 3 or 4 deliveries. This number from our research is consistent with the numbers from other studies about pelvic prolapse risk factors [16]. In addition, in 95% of women history of vaginal delivery was obtained. Previous study done by Sahin and Vural suggest that after each vaginal delivery the risk of urogenital prolapse development increases 1.2 times [16]. Results of our study fully confirm this hypothesis.

As we mentioned above genital prolapse symptoms are not life threatening, but prolapse has significant negative effects on mental health of woman, builds some burdens for woman in social and sexual life and decreases dramatically woman's the quality of life. In our study, the average scores for genital prolapse effects on general health perception and quality of life was quiet high at baseline (48 and 80 respectively). In a previous study carried out in European women by Digesu and colleagues, the scores for same domains were higher than in the results of our study [20]. From the demonstrated data we can suggest that, for the Georgian women general health perception and the effect of prolapse are better tolerated and have less negative impact on their quality of life. In contrast to these results Srikrishna and colleagues demonstrated much lower scores for effect of prolapse on general health perception [21].

Our study demonstrates that depressive signs improved significantly after surgical treatment. Improved mental health status could have positive effect on women's quality of life after surgical intervention. These results consist with the results of previous study from the U.S., which also demonstrated better QOL after surgical treatment. The reason for such QOL improvement can be depressive symptoms [22]. Prolapse may increase symptoms of depression and anxiety, while symptoms of depression and anxiety may impact health behavior, symptom burden, QOL, and functional impairment pre- and post-operatively. Surgery aims to improve QOL by correcting the prolapse. The results of our study were fully consistent with the results of this study: our research also found that surgery leads to a dramatic improvement not only in condition-specific QOL but also in depressive symptoms.

Conclusion

The results of our study were fully consistent with the results of previous studies: our research also found that surgery leads to a dramatic improvement not only in depressive symptoms but also in condition-specific quality of life. After surgery, during 3 month recall period progressive improvement in all domains of quality of life have been observed.

Conflict of Interest

All authors declare no conflict of interests.

Bibliography

1. Chauvin Christian., *et al*. "Potential relevance of pre-operative quality of life questionnaires to identify candidates for surgical treatment of genital prolapse: a pilot study". *BMC Urology* 12 (2012): 9.

2. Swift S., *et al*. "Pelvic Organ Support Study (POSST): the distribution, clinical definition, and epidemiologic condition of pelvic organ support defects". *American Journal of Obstetrics and Gynecology* 192.3 (2005): 795-806.

3. Onwude Joseph Loze. "Genital prolapse in women". *BMJ Clinical Evidence* (2009).

4. SL Hendrix., *et al*. "Pelvic organ prolapse in the Women's Health Initiative: gravity and gravidity". *American Journal of Obstetrics and Gynecology* 186.6 (2002): 1160-1166.

5. I Nygaard., *et al*. "Pelvic organ prolapse in older women: prevalence and risk factors". *Obstetrics and Gynecology* 104.3 (2004): 489-497.

6. Giarenis Ilias and Dudley Robinson. "Prevention and management of pelvic organ prolapse". *F1000 Prime Reports* 6 (2014): 77.

7. Smith FJ., *et al*. "Lifetime risk of undergoing surgery for pelvic organ prolapse". *Obstetrics and Gynecology* 116.5 (2010): 1096-1100.

8. Murphy M., *et al*. "Time to rethink: an evidence-based response from pelvic surgeons to the FDA Safety Communication: "UPDATE on Serious Complications Associated with Transvaginal Placement of Surgical Mesh for Pelvic Organ Prolapse". *International Urogynecology Journal* 23.1 (2012): 5-9.

9. Miller D., *et al*. "Informed surgical consent for a mesh/graft-augmented vaginal repair of pelvic organ prolapse. Consensus of the 2nd IUGA Grafts Roundtable: optimizing safety and appropriateness of graft use in transvaginal pelvic reconstructive surgery". *International Urogynecology Journal* 23.1 (2012): S33-S42.

10. Curtiss Natasha and Jonathan Duckett. "A long-term cohort study of surgery for recurrent prolapse comparing mesh augmented anterior repairs to anterior colporrhaphy". *Gynecological Surgery* 15.1 (2018): 1.

11. Olsen A., *et al*. "Epidemiology of surgically managed pelvic organ prolapse and urinary incontinence". *Obstetrics and Gynecology* 89.4 (1997): 501-506.

12. Rudnicki M., *et al*. "Anterior colporrhaphy compared with collagen-coated transvaginal mesh for anterior vaginal wall prolapse: a randomised controlled trial". *BJOG: An International Journal of Obstetrics and Gynaecology* 121.1 (2014): 102-111.

13. Meyer I., *et al*. "Synthetic Graft Augmentation in Vaginal Prolapse Surgery: Long-Term Objective and Subjective Outcomes". *Journal of Minimally Invasive Gynecology* 23.4 (2016): 614-621.

14. Maher C., *et al*. "Transvaginal mesh or grafts compared with native tissue repair for vaginal prolapse". *Cochrane Database of Systematic Reviews* 2 (2016): CD012079.

15. GL Jones., *et al*. "Responsiveness of the electronic Personal Assessment Questionnaire-Pelvic Floor (ePAQ-PF)". *International Urogynecology Journal - and Pelvic Floor Dysfunction* 20.5 (2009): 557-564.

16. Şahin E and Vural G. "Assessment of the Quality of Life in Women with a Diagnosis of Urogenital Prolapse". *International Journal of Caring Sciences* 8.2 (2015): 404.

17. Doaee M., *et al*. "Management of pelvic organ prolapse and quality of life: a systematic review and meta-analysis". *International Urogynecology Journal* 25.2 (2014): 153-163.

18. MD Barber., *et al*. "Psychometric evaluation of two comprehensive condition-specific quality of life instruments for women with pelvic floor disorders". *American Journal of Obstetrics and Gynecology* 185.6 (2001): 1388-1395.

19. Chuang FC., *et al*. "Validation of the traditional Chinese version of the prolapse quality of life questionnaire (P-QOL) in a Mandarin-speaking Taiwanese population". *Taiwanese Journal of Obstetrics and Gynecology* 55.5 (2016): 680-685.

20. GA Digesu., *et al*. "P-QOL: a validated questionnaire to assess the symptoms and quality of life of women with urogenital prolapse". *International Urogynecology Journal - and Pelvic Floor Dysfunction* 16.3 (2005): 176-181.

21. Srikrishna S., *et al*. "Experiences and Expectations of Women with Urogenital Prolapse: a Quantitative and Qualitative Exploration". *BJOG: An International Journal of Obstetrics and Gynaecology* 115.11 (2008): 1362-1368.

22. Ghetti Chiara., *et al*. "Depressive symptoms in women seeking surgery for pelvic organ prolapse". *International Urogynecology Journal* 21.7 (2010): 855-860.

Volume 8 Issue 9 September 2019
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