

FASCIAL SURGICAL REPAIR FOR PELVIC ORGAN PROLAPSE: EFFECT ON QUALITY OF LIFE AND RELATED SYMPTOMS

Hypothesis / aims of study

One of the most important aspects to assess the effects of treating the pelvic organ prolapse (POP) is the quality of life (QoL) [1]. For this evaluation is recommended the use of validated questionnaires in clinical studies [2] to the assessment of surgical outcomes because they may be useful in assessing the functional surgery [3]. It is important for surgeons to consider the impact of surgery on quality of life of patients to reinforce their clinical decisions. The aim of this study is to evaluate the effects of surgical repair of POP on related pelvic floor function and symptoms on quality of life.

Study design, materials and methods

Cohort study was conducted enrolling 65 patients with relevant POP symptoms and indicated surgical repair. Women with neurological or collagen diseases, carriers of HTLV 1 and 2, with anal incontinence, pregnant women who have undergone childbirth or gynecological surgery within 12 months prior to participation in the study were excluded. Women with cognitive disabilities that compromise the comprehension of questionnaires were also excluded. The study was approved by the local Ethics Committee in Research and all persons gave their informed consent prior to their inclusion in the study. Within a week to 24 hours before surgery, sixty-two patients completed the Prolapse - Quality of Life Questionnaire (P-QoL). High total score indicates greater impairment of quality of life, while low score indicates good quality of life. The questionnaire was read to all patients. After completing them, patients were examined in the lithotomy position and staged by Pelvic Organ Prolapse Quantification System (POP-Q). The questionnaires were applied and the POP-Q established again three and six months after surgery. All patients were evaluated in the same position by the same researcher on the three occasions. Women were subjected to different surgical techniques, all with fascial repair. One or more types of surgeries were performed on the same patient (anterior colpoplasty, posterior colpoperineoplasty, sacrocolpopexy, or vaginal hysterectomy). Patients with complaints of urinary incontinence underwent surgery transobturator sling or retropubic colposuspension by Burch technique to concomitant prolapse repair.

Statistical analysis of pre- and postoperative data was performed with GraphPad Instat 7.0 software for non-parametric Kruskal-Wallis test. For statistical tests, 5% significance was used.

Results

All sixty-two women completed the questionnaire preoperatively and three and six months after surgery. According to the POP-Q, 23.1% of women had prolapse at stage 2, 46.1% stage 3 and 30.8% stage 4. Forty-nine (79.0%) women had ever undergone procedures to correct prolapse, 58 (93.5%) were postmenopausal and 36 (58.0%) were sexually inactive. Among women without sexual activity, 29 (80.5%) were aged over 60 years. A total of 120 procedures were performed among.

The staging of POP postoperatively was lower than that reported before surgical repair. The median POP staging preoperatively and three and six months after surgical repair were, respectively 3 (range 2 to 4), 2 (range 0 to 3) and 2 (range 0 to 3) ($p < 0.0001$). There was no difference between the staging of POP observed in three and six months postoperatively ($p > 0.05$).

The scores of all domains of P-QoL and quantification of voiding, vaginal and bowel symptoms were lower compared to those found preoperatively in both third and sixth months after surgical correction. There was no difference between the P-QoL scores and sum of symptoms compared to the three and six months postoperatively (Tables 1 and 2).

Interpretation of results

After fascial POP repair in this study, there was significant improvement in the scores for all domains of the P-QoL as well as in the bladder, sexual and bowel symptoms and the POP staging. This improvement was significant at three and six months after surgical correction compared to the preoperative assessment. There was no difference in the questionnaire scores and POP staging between three and six months after surgical repair, indicating the stability of the surgical results in the first six months after surgery.

Concluding message

Both the quality of life as related to the function of pelvic organ symptoms improved after fascial surgical repair during the study period, demonstrating that surgery for POP with fascial repair are effective for patients with pelvic floor dysfunction.

Table 1: P-Qol scores before the surgical repair and after 3 and 6 months postoperative.

| Domains | Preoperative | Postoperative (3 months) | Postoperative (6 months) | P value |
|---------------------------|-----------------------------------|---------------------------------|---------------------------------|---|
| | A | B | C | |
| Prolapse impact | 76.5 ± 30.6 [100.0] (0-100) | 6.6 ± 17.0 [0] (0-100) | 8.7 ± 21.9 [0] (0-100) | <0.0001 A x B < 0.001 A X C < 0.001 |
| General health perception | 42.4 ± 19.8 [50.0] (25-100) | 24.6 ± 12.7 [25.0] (0-50) | 25.4 ± 15.9 [25.0] (0-75) | <0.0001 A x B < 0.001 A X C < 0.001 |
| Role limitation | 46.4 ± 39.2 [33.33] (0-100) | 3.3 ± 14.9 [0] (0-100) | 3.3 ± 14.9 [0] (0-100) | <0.0001 A x B < 0.001 A X C < 0.001 |
| Physical limitations | 48.4 ± 39.5 [33.33] (0-100) | 3.3 ± 15.8 [0] (0-100) | 3.3 ± 15.8 [0] (0-100) | <0.0001 A x B < 0.001 A X C < 0.001 |
| Social limitations | 30.6 ± 32.2 [22.22] (0-100) | 2.5 ± 13.7 [0] (0-100) | 2.7 ± 13.7 [0] (0-100) | <0.0001 A x B < 0.001 A X C < 0.001 |
| Personal relationships | 61.5 ± 37.6 [66.7] (0-100) | 9.8 ± 20.7 [0] (0-66.7) | 12.1 ± 26.3 [0] (0-100) | <0.0001 A x B < 0.001 A X C < 0.001 |
| Emotion | 43.2 ± 40.4 [33.33] (0-100) | 5.5 ± 17.8 [0] (0-100) | 7.3 ± 23.6 [0] (0-100) | <0.0001 A x B < 0.001 A X C < 0.001 |
| Sleep/energy | 26.0 ± 31.6 [16.7] (0-100) | 5.2 ± 14.1 [0] (0-66.7) | 7.6 ± 20.5 [0] (0-100) | <0.0001 A x B < 0.001 A X C < 0.001 |
| Symptom severity | 28.7 ± 23.8 [25.0] (0-100) | 2.6 ± 9.8 [0] (0-66.7) | 3.9 ± 10.9 [0] (0-66.7) | <0.0001 A x B < 0.001 A X C < 0.001 |

. (Mean ± Standard deviation); [median]; (Range)

Table 2: P-Qol symptoms related to pelvic function before the surgical repair and after 3 and 6 months postoperative.

| | Preoperative | Postoperative (3 months) | Postoperative (6 months) | P Value |
|--|--------------------------------|------------------------------|------------------------------|---|
| | A | B | C | |
| Bladder symptoms (Sum of the 3a, 3b, 3c, 3d, 3i, 3j, and 3k questions) | 17.1 ± 5.9 [18.0] (0-28) | 9.0 ± 4.4 [8.0] (0-23) | 8.9 ± 4.7 [7.0] (0-23) | <0.0001 A x B < 0.001 A X C < 0.001 |
| Vaginal symptoms (Sum of the 3e, 3f, 3h, 4d, and 4e questions) | 13.9 ± 4.8 [14.0] (0-23) | 5.8 ± 2.7 [5.0] (0-20) | 5.7 ± 2.8 [6.0] (0-20) | <0.0001 A x B < 0.001 A X C < 0.001 |
| Bowel Symptoms (Sum of the 3g, 4a, 4b, 4c, 4f, and 4g questions) | 11.0 ± 3.5 [11.0] (0-18) | 7.8 ± 3.6 [7.0] (0-16) | 7.3 ± 3.7 [6.5] (0-16) | <0.0001 A x B < 0.001 A X C < 0.001 |

(Mean ± Standard deviation); [median]; (Range)

References

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Disclosures

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