

INTERMEDIATE-TERM OUTCOME AFTER MODIFIED LAPAROSCOPIC SACROPEXY: IMPROVEMENT OF VAGINAL SYMPTOMS AND SUBJECTIVE SUCCESS RATES - A HOSPITAL BASED COHORT STUDY

Hypothesis / aims of study: In general, patients suffering from genital prolapse report about vaginal pressure, pain or even an extern bulge. Subjective success rate after surgical repair depends rather on an improvement of these symptoms than on an anatomical correct reconstitution of descended parts. Various operative approaches for the repair of a genital prolapse have been reported yet, but for the reconstitution of a physiological axis of the vagina regarding size, depth and slant a sacropexy seems to be the most adequate approach. The gentle laparoscopic sacropexy is a modification of the classical laparoscopic sacropexy. A bluntly and strict superficial preparation between spine and right pelvis, the extra abdominal preparation of the mesh and a perioperative treatment comparable to the "fast track surgery" are some characteristics of the German method. The aim of this study was to evaluate the intermediate- term outcome after modified laparoscopic sacropexy (German method) concerning improvement of vaginal symptoms and subjective success rate.

Study design, materials and methods: 132 patients suffering from genital prolapse higher than grade one POPQ (pelvic organ prolapse quantification) underwent laparoscopic sacropexy in the modification of the German method (1) during March 2005 and December 2006. In case of an extant uterus we preferred a simultaneous laparoscopic supracervical hysterectomy (n=62). Anterior and posterior colporrhaphia, lateral repair and anti-incontinence operations were performed simultaneously if necessary. All patients were asked retrospectively in a validated questionnaire about vaginal symptoms before and at least one year after operative repair using the ICIQ- VS (German). Additionally subjective success rate was estimated using a self administered rating scale (0 = worst result, not content, 10 = best result, maximum content). Statistical analysis was performed using SPSS (t-test and Wilcoxon test).

Results We had a response rate of 84 % (n=111). The mean follow-up interval was 22. 2 month (range 13-34 month). Mean age at operation was 58.9 years (31-83 years).

After laparoscopic repair we found an improvement of vaginal symptom score from 20.6 preoperatively to 5.3 postoperatively. Sexual matter score improved from 26.3 to 8.9 after operation. 57.6 % of our patients were sexual active. Figure 1 demonstrates the details of sexual activity before and after operation. Single item analysis revealed a statistical relevant improvement of all items and scores except vaginal tightness (table1). Improvement of quality of life scores (part b questions) correlated to these findings (figure 2). After operation interference of vaginal symptoms to daily life (question 14) improved from 6.4 to 1.4. Mean subjective success rate was 8.3 points. 6.3 % of the patients were rather discontent (0-3 points).

Interpretation of results: Vaginal pain and lump represent the predominant symptoms in patients suffering from genital prolapse and are reduced adequate after modified laparoscopic sacropexy. Sexual active patients benefit from sacropexy concerning the impairment during intercourse. Patients who are inactive due to descensus do not change their sexuality after repair. Probably these patients realised after operation, that prolapse was not the predominant factor for their inactivity. In contrast to vaginal approaches vaginal tightness is not influenced negatively. Sacropexy reconstitutes only an approximated original anatomic position of vagina. Improvement of quality of life as well as subjective success rates of our patients affirms that a reduction of vaginal symptoms is rather important for the outcome than the anatomical correct reconstitution of descended parts.

Concluding message: The modified laparoscopic sacropexy (German method) shows good intermediate- term results respectively improvement of vaginal symptoms and subjective success rate.

| | Mean pre-operative | Mean post-operative | Confidence interval | P value | Mean difference |
|-------------------------------|--------------------|---------------------|---------------------|---------|-----------------|
| Vaginal symptoms n=111 | | | | | |
| Dragging pain (1) | 1.6 | 0.6 | 0.8/1.2 | <0.001 | 1.0 |
| Soreness (2) | 1.0 | 0.3 | 0.5/0.9 | <0.001 | 0.7 |
| Reduced sensation (3) | 0.8 | 0.3 | 0.2/0.6 | <0.001 | 0.4 |
| Loose vagina (4) | 1.7 | 0.4 | 1.1/1.5 | <0.001 | 1.3 |
| Lump inside (5) | 2.7 | 0.3 | 2.1/2.6 | <0.001 | 2.4 |
| Lump outside (6) | 1.5 | 0.05 | 1.1/1.7 | <0.001 | 1.4 |
| Dry vagina (7) | 1.2 | 0.9 | 0.1/0.5 | <0.01 | 0.3 |
| Faecal evacuation (8) | 0.4 | 0.1 | 0.1/0.4 | <0.01 | 0.2 |
| Sum score VS | 20.6 | 5.3 | 13.3/17.3 | <0.001 | 15.3 |
| Sexual symptoms n=64 | | | | | |
| Tight vagina (9) | 0.2 | 0.2 | -0.1/0.2 | 0.66 | 0.02 |
| Worries (11) | 1.6 | 0.5 | 0.8/1.3 | <0.001 | 1.1 |
| Relationship aff (12) | 1.1 | 0.4 | 0.5/0.9 | <0.001 | 0.7 |
| Sex life spoilt (13) | 4.8 | 1.0 | 2.5/4.1 | <0.001 | 3.3 |
| Sum score sexual | 26.3 | 8.9 | 13.4/21.6 | <0.001 | 17.4 |
| Interference of life (14) | 6.4 | 1.4 | 4.5/5.6 | <0.001 | 5.0 |

Table 1 Statistical parameters of single items (part a) and sum scores

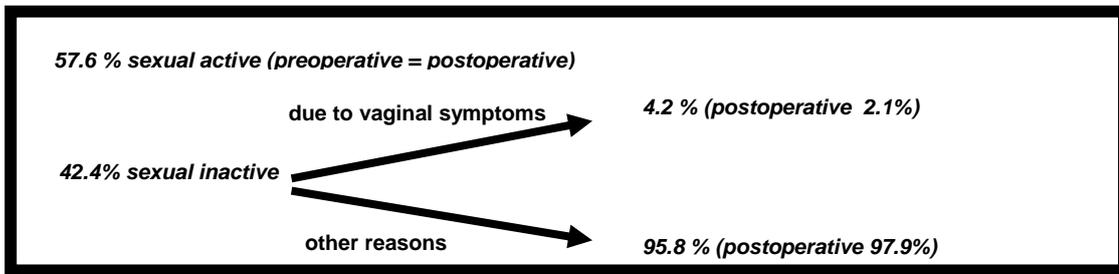


Figure1. Sexual activity before and after operation

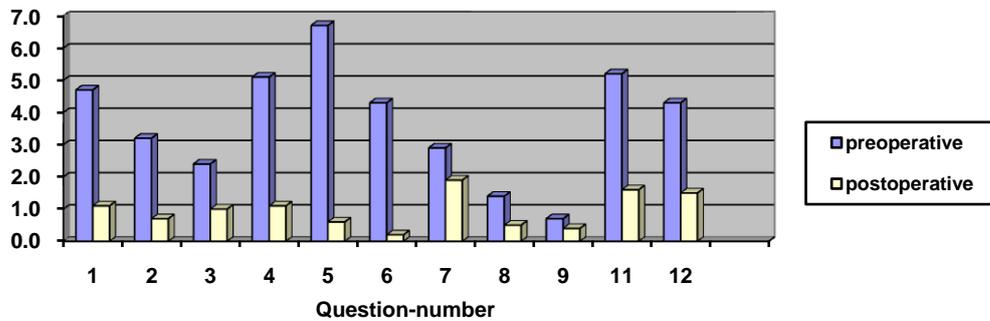


Figure 2: Quality of life questions (part b): pre- and postoperative mean values. All items except of question 9 showed significant improvement ($p < 0.001$, question 9: $p = 0.08$)

References

- Banerjee C., Noé G. Laparoscopic Sacropexy - An Underestimated Method of Vaginal Vault Surgery. Geburtsh Frauenheilk 2008; 68: 492-496

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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>What were the subjects in the study?</i> | HUMAN |
| <i>Was this study approved by an ethics committee?</i> | No |
| <i>This study did not require ethics committee approval because</i> | we used retrospective questionnaire. All patients agreed in participation of that study. |
| <i>Was the Declaration of Helsinki followed?</i> | Yes |
| <i>Was informed consent obtained from the patients?</i> | Yes |