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# COMPLICATION RATE OF PELVIC ORGAN PROLAPSE REPAIR WITH PROLIFT TRANSVAGINAL MESH

## Hypothesis / aims of study

The aim of this study was an evaluation of safety and efficacy of surgical management of female pelvic organ prolapse (POP) with application of transvaginal synthetic Prolift meshes.

## Study design, materials and methods

The present retrospective study comprised 204 patients who underwent surgery at Female Urology department of our Clinic between January 2006 and September 2009. All patients had a genital prolapse stage 3-4 according to POP-Q International Continence Society classification. According to each case, prosthetic interposition was total, or anterior only or posterior only. In total, seventy five anterior (36.8%), eighteen posterior (8,8%) and one hundred eleven total Prolift procedures (54,4%) were performed. Patients were systematically seen within 1 month, 3 months and 12 months after surgery. Multivariate statistical analysis followed a model of logistic regression applied to each post-surgical complication.

The mean age of patients was 65.1 years. The mean follow-up period was 13 months (3-41). One hundred and forty five patients reported symptoms resolution (71.1%). Another 52 females considered their symptoms significantly improved (25.5%) after prolapse repair. Failure of mesh surgery was found in 7 patients (3.4%). All patients with prolapse recurrence had isolated anterior (6) either posterior meshes (1). Only two patients have had concomitant hysterectomy during POP repair.

In–surgery complications were three bladder wounds (1.47%), two cases of rectal injuries (0.98%), two vascular injures (0.98%) and three hemorrhages greater that 500 cc (1.47%). Among early post-surgical complications (during the first month after surgery) were twelve pelvic hematomas (5.88%) and three cases of residual urine more than 200 cc (1.47%). Among late post-surgical complications there were fourteen mesh erosions (6.86%), two cases of persistent pelvic pain (0.98%). In eight patients (3.92%) we have found secondary prolapse in another compartment of pelvic floor after isolated anterior or posterior repair. Other complications are presented in the table 1.

Table 1.

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|------------------------------|-----|-------|
| Complications (204 patients) | No  | %     |
| Bladder perforation          | 3   | 1.47% |
| Rectal injury                | 2   | 0.98% |
| Major vascular injury        | 2   | 0.98% |
| Bleeding >500 cc             | 3   | 1.47% |
| Urinary retention            | 3   | 1.47% |
| Hematoma                     | 12  | 5.88% |
| Mesh erosion                 | 14  | 6.86% |
| Post-operative pain          | 2   | 0.98% |
| SUI de novo                  | 14  | 6.86% |
| OAB de novo                  | 6   | 2.94% |
| UTI                          | 3   | 1.47% |
| Dyspareunia                  | 2   | 0.98% |
| Another compartment prolapse | 8   | 3.92% |

#### Interpretation of results

Management of genital prolapse with synthetic prostheses interposed through vaginal approach is safe and efficient method. It can be reproduced with a low rate of perioperative and early post-surgical complications. In 13 months follow up we found very low recurrence rate after surgery. 71.1% of patients considered themselves cured and 25.5% of women we improved after mesh surgery.

#### Concluding message

Transvaginal Prolift mesh technique is effective and safe method of treatment of genital prolapse with a low rate prolapse recurrence. An intraoperative and early post-surgical complications are quite modest. However further randomized clinical trials are needed to recommend this technique as the gold standard.

| Specify source of funding or grant               | Nothing to disclose                                     |
|--|---|
| Is this a clinical trial?                        | No  |
| What were the subjects in the study?             | HUMAN   |
| Was this study approved by an ethics committee?  | Yes   |
| Specify Name of Ethics Committee                 | Ethics Committee of Moscow State Medical Stomatological |
|  | University  |
| Was the Declaration of Helsinki followed?        | Yes   |
| Was informed consent obtained from the patients? | Yes   |