

LATE POST-SURGICAL COMPLICATION AND REOPERATION RATE AFTER VAGINAL MESH SURGERY

Hypothesis / aims of study

Late post-surgical complication after insertion of synthetic vaginal implants such as erosion occurs in 1-10% operated women [1]. In most cases the non-invasive management (antibiotics and local estrogens) is sufficient but sometimes there is necessity of partial or complete removal of a prosthesis. Stress urinary incontinence (SUI) often coexists with pelvic organ prolapse [2]. SUI may occur as symptomatic or occult form. The frequency of occult SUI is assessed at 15-80% and not recognized before pelvic organ prolapse repair surgery, can be a cause of next operation [3]. Although the efficacy of Prolift[®] System exceeds 90%, prolapse recurrence and need for subsequent surgical treatment may also occur. The aim of the study was to assess the reoperations rate in a group of patients who underwent Prolift[®] System procedure due to advanced pelvic organ prolapse.

Study design, materials and methods

One hundred eighteen patients, out of 486, who underwent reconstructive surgery due to pelvic organ prolapse (POP) between June 2008 and December 2009, signed informed consent, fulfilled the inclusion criteria and were included in the study. The median age of patients was 58 years (from 34 to 79). Prolapse severity before operation was evaluated using Pelvic Organ Prolapse Quantification Scale (POP-Q). Thirty eight patients (32%) had stage IV according to POPQ scale, 67 patients (57%) had both cystocele in stage III and rectocele in stage II, 7 patients (6%) had stage III of rectoenterocele and 6 patients (5%) presented stage III of cystocele. Before surgery 41 women (35%) suffered from stress urinary incontinence. Eight patients (7%) previously underwent hysterectomy, 4 (3%) surgery due to stress urinary incontinence and 17 (14%) surgical treatment of pelvic organ prolapse. In 79 (67%) women both anterior and posterior Prolift[®] System was done, in 12 (10%) patients only posterior and in 18 (15%) patients only anterior Prolift[®] System operation was performed whereas in 8 (7%) cases Total Prolift[®] System was inserted. Additionally the Prolift[®] System procedure was combined with anti-incontinence surgery (transobturator tape) in 41 (35%) patients. Concomitant cervix amputation was performed in 26 (22%) women. In 34 (29%) patients posterior mesh repair was supplemented with posterior colporrhaphy.

Results

First follow-up visits took place 6 weeks after surgery and the second between 3 and 8 months. Group characteristic is shown in Figure 1. Twenty out of 118 patients (17%) required the additional operation due to late post-surgical complications. Among these complications we observed 8 (7%) cases of *de novo* SUI, 10 (8%) patients with recurrence of prolapse (in stage IIc according to POPQ in 4 women and in stage IIIc in 6 women), one (0.8%) case of granuloma and 6 (5%) cases of mesh erosions. In 8 patients who developed SUI after primary operation IVS 04M surgery was performed. Cervix amputation including posterior colporrhaphy was performed in 9 patients with prolapse recurrence and in one woman sacrocolpopexy was done. In case of mesh erosion and granuloma formation, partial removal of exposed prosthesis and granuloma tissue dissection was carried out. Analysis of cases with prolapse recurrence revealed that decrease of urogenital hiatus by additional posterior colporrhaphy can reduce cervix prolapse.

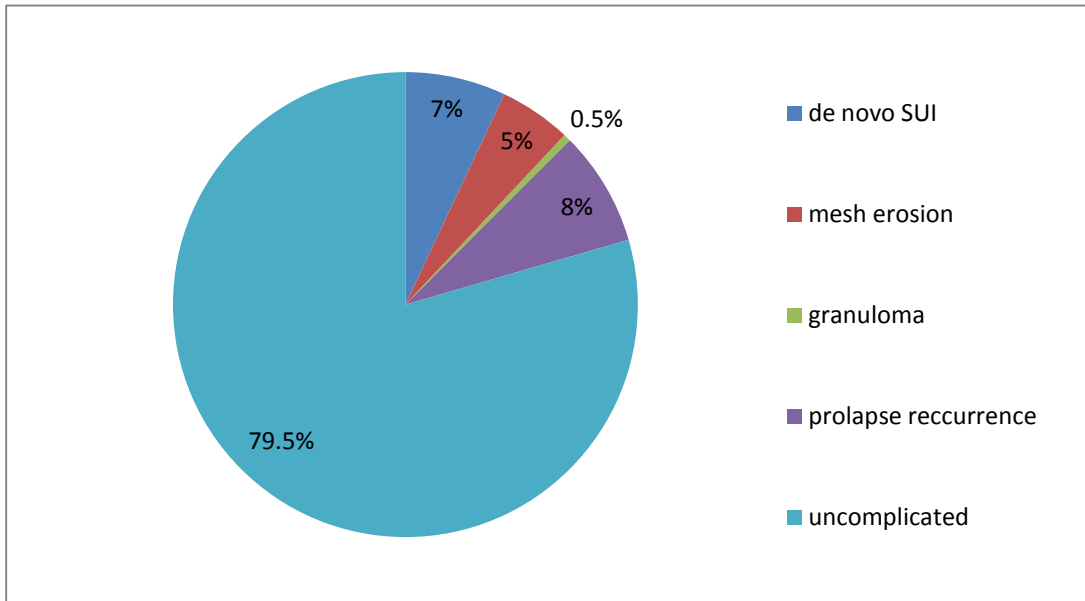
Interpretation of results

Analysis of results clearly shows that majority of reoperations were performed due to *de novo* SUI and apical prolapse recurrence. Therefore there is necessity for better diagnosis of occult incontinence in women with severe prolapse and in cases of procidentia additional effort in order to proper fixation of apical defect. These could be achieved by concomitant anti-incontinence surgery among patients with occult incontinence and by applying Fothergill operation altogether with perineal body reconstruction in patients with severe apical prolapse. As shown from our material adequate preparation could decrease mesh erosion rate to 5%.

Concluding message

Surgery treatment of genital prolapse with synthetic prostheses interposed by vaginal route is effective and characterized by a low rate of late post-surgical complications. However our study shows certain number of late post-surgical complications which require reoperation. More careful diagnosis of possible occult SUI before treatment and concomitant anti-incontinence procedure parallel to a prolapse repair operation may reduce the incidence of postoperative urinary incontinence. Moreover the combination of classical Fothergill operation accompanied by decreasing of urogenital hiatus achieved by proper reconstruction of perineal body reduces cervix prolapse after Prolift[®] procedure and therefore might decrease reoperation rate after primary prolapse surgery.

Figure 1. Group characteristic after 8 months of follow up.



References

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2. Bai SW, Jeon MJ, Kim JY. Relationship between stress urinary incontinence and pelvic organ prolapse. Int Urogynecol J Pelvic Floor Dysfunct 2002;13, 256-260.
3. Haessler AL, Lin LL, Ho MH. Reevaluation occult incontinence. Cur Opin Obstet Gynecol 2005;17, 535-540.

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<i>Specify Name of Ethics Committee</i>	Ethics Committee of Medical University of Lublin
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes