

POLYPROPYLENE MESH IN SURGICAL REPAIR OF PELVIC ORGAN PROLAPSES

Hypothesis / aims of study

To report the preoperative symptoms, intra- and postoperative complications and subjective outcome in pelvic organ prolapse repair using transvaginal polypropylene mesh (Prolift TM, Ethicon, Sommerville, NJ, USA).

Study design, materials and methods

A retrospective study including the first 100 patients operated on between June 2005 and April 2007. The data was collected from hospital records from the first outpatient visit to follow-up visit at two months. A questionnaire was sent to evaluate an average of one year follow-up of subjective outcome.

Results

Anterior mesh was used in 48, posterior mesh in 45, total mesh in five and combined anterior and posterior mesh in two patients. The mean age was 65 years, mean BMI 27 and mean parity 2.6. Previous gynecological operations had been performed in 72% of the patients and 65% of these were due to pelvic organ prolapse. Preoperatively the most common symptoms was feeling of pressure (56%), voiding dysfunction (46%), difficulties in defecation (30%), urinary incontinence (31%) and urinary urgency (20%). Twenty two percent of patients underwent concomitant operations such as colporrhaphy, sacrospinous ligament fixation, tension-free vaginal or transobturator tape and hysterectomy. The median for operation time was 72 min (range 27-160). The median for blood loss was 100 ml (range 10-1100). The median for hospital stay was 3.8 days (range 0-12). Two intraoperative complications, blood loss over 1000 ml, occurred. There were no visceral injuries. Postoperative complications such as mild infections (28%), mesh exposures (14%), *de novo* stress urinary incontinence (SUI) (19%), urinary or defecation symptoms (13%) and dyspareunia, groin or buttock pain (10) occurred during two months follow-up. Reoperations were needed for nine mesh exposures, three haematoma evacuations and 14 procedures for SUI. No recurrence of pelvic organ prolapse was diagnosed during a follow-up of two months.

A questionnaire sent an average of one year postoperatively was responded by 89 patients. All preoperative symptoms were cured in 53 patients. Persistent symptoms were reported by 33 patients, such as urinary frequency, stress urinary incontinence, and difficulty in defecation. Forty three patients developed *de novo* symptoms. Four patients reported *de novo* stress urinary incontinence. Sixteen of the 38 sexually active patients reported dyspareunia. Sixty three (71%) patients were satisfied with the operation and 73 patients (82%) would recommend this procedure to a friend.

Interpretation of results

This preliminary study is a report of the first 100 patients with pelvic organ prolapse repaired by using transvaginal polypropylene mesh. The procedure was performed in our clinic by four senior doctors and this data consists of the learning curves of these four doctors. The high rate of *de novo* symptoms reported by the patients may refer to a quite detailed questionnaire enquiring all possible postoperative complaints. Consequently, it will be necessary to evaluate the objective outcome.

Concluding message

Though many patients experienced some postoperative problems, no serious complications occurred. Most of the patients were satisfied with the outcome of this procedure.

<i>Specify source of funding or grant</i>	NONE
<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>	Yes
<i>Specify Name of Ethics Committee</i>	Southern Finland Hospital District Ethics Committee
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes