



Simultaneous self-created transobturator tape and laparoscopic extraperitoneal vaginal support in patients with stress urinary incontinence and prolapse of the anterior and apical vaginal compartments



Ivan Ignjatovic^{a,*}, Dragoslav Basic^a, Milan Potic^a, Ljubomir Dinic^a, Jablan Stankovic^a, Svetlana Pavlovic^b, Vladimir Milic^b, Aleksandar Skakic^a

^a Department of Urology, Clinical Center Nis, School of Medicine, Nis, Serbia

^b Center for Anesthesia, Clinical Center Nis, School of Medicine, Nis, Serbia

ARTICLE INFO

Article history:

Received 6 January 2016

Received in revised form 10 June 2016

Accepted 28 June 2016

Keywords:

Stress urinary incontinence

Prolapse

Transobturator tape

Laparoscopy

ABSTRACT

Objective: Stress urinary incontinence (SUI) is frequently associated with prolapse of the apical and anterior vaginal compartments. The standard treatment of SUI is transobturator tape (TOT). The usual treatment of prolapse (anterior colporrhaphy) has a high recurrence rate. The aim of this study is to evaluate the results of the treatment of SUI and concomitant anterior and apical prolapse with self-created transobturator tape and simultaneous laparoscopic anterior and apical support.

Study design: A total of 36 patients with SUI and prolapse of the anterior and apical compartments were underwent operations. The mean follow-up was 18 months. Self-created transobturator tape and laparoscopic support of the anterior and apical compartment prolapse were performed in all patients. The most important symptoms of prolapse and incontinence, the anatomical outcome, and complications were evaluated before and after the surgery.

Results: Treatment of incontinence and anterior and apical prolapse was successful in 33/36 (91.7%), 30/36 (83.3%) and 31/36 (86.1%) patients, respectively ($p < 0.0001$). There is a significant reduction of vaginal bulging and pelvic pressure ($p < 0.0001$). Frequency and urgency were significantly reduced ($p < 0.0007$ and $p < 0.03$ respectively). There was no significant deterioration of the posterior compartment. The most important complications were bladder perforation in 2/36 (5.5%) patients and temporary urinary retention in 3/36 (8.3%) patients (Clavien-Dindo grade 3).

Conclusion: Simultaneous laparoscopic anterior and lateral extraperitoneal support and transobturator tape are effective in the treatment of patients with both conditions.

© 2016 Elsevier Ireland Ltd. All rights reserved.

Introduction

Pelvic organ prolapse (POP) is a frequent condition affecting almost 30% of women between the ages of 30 and 59 [1]. POP stage 0 exists in 2.4%, stage 1 in 33%, stage 2 in 62.9% and stage 3 in 1.9% of patients [2]. Incidence increases with the age and depends on definition of POP. Urinary incontinence is the most common dysfunction of the pelvic floor, affecting between 17% and 35% of the whole female population [3,4]. Stress urinary incontinence (SUI), is the most common form among the different types of incontinence [3]. The concomitant appearance of both SUI and

anterior and apical prolapse is not a rare case. As the population generally becomes older, females are more socially active; therefore, the requirements for the improvement of quality of life also increase [3].

Retropubic tension-free mid urethral tape (TVT) became a first line surgical treatment of SUI. Transobturator tape (TOT) is more frequently performed in recent years because of its simplicity, no life-threatening complications, avoidance of obligatory cystoscopy and satisfactory success rate [5].

The most frequent type of POP, cystocele, is usually corrected by simple native tissue repair (colporrhaphy). This type of corrective surgery is prone to a high incidence of recurrence and a high reoperation rate, especially in cases with associated apical prolapse. Vaginal meshes improved the anatomical outcome of the surgery, but without spectacular functional results [6].

* Corresponding author.

E-mail address: ivanig@live.com (I. Ignjatovic).

Sacrocolpopexy (SCP), opened, laparoscopic or robotic, is usually performed in patients with multicompartiment POP. It is the most efficient method of restoring normal vaginal anatomy and functionality. The most accepted approach, laparoscopic SCP, remains fairly complicated due to limited mobility of laparoscopic instruments, learning curve, morbidity, etc. It is easier to perform the surgery robotically, but the limitation of the cost of the procedure always exists [6].

The aim of this study is to evaluate the effect of the simplified laparoscopic procedure of anterior and lateral vaginal support performed together with TOT in patients with anterior and apical compartment prolapse.

Materials and methods

A total of 36 females underwent operations. The following were evaluated in all patients: prolapse symptoms (vaginal bulging, and pelvic pressure), stress incontinence (positive clinical finding or 1 episode/24 h), frequency (more than 12 voids/24 h), urgency (1 episode/24 h), bowel problems, and sexual function [7]. Patients who fulfilled criteria for both SUI and urgency/urgency incontinence/were considered as mixed incontinence.

The preoperative examination included a stress test and 20 'pad test' when necessary and evaluation of urethral hypermobility and prolapse in the representative points (Aa, Ba, C, TVL and Bp) of the POPQ system. Ultrasound evaluation of the kidneys and bladder, as well as, an estimation of residual urine, was performed in all patients before and after surgery. Additional tests, such as cystoscopy and uroflowmetry, were performed whenever necessary.

Operative technique

All patients were placed in a supine position, and the lower extremities were elevated in order to enable vaginal and laparoscopic manipulation with minimal repositioning.

48 g/m² weight polypropylene mesh (30 cm × 30 cm) (Pelvimesh, Herniamesh, Torino, Italy) was used for both TOT and mesh for the laparoscopic procedure. TOT was placed first. The technique of self-creation and placement of the tape was published

previously [8]. The placement was performed with an "outside-in" approach [8,9]. After the first part of the surgery, the lower extremities were moved down (30–45°), and three trocars were used for the laparoscopy: an infraumbilical 10-mm camera reusable trocar, a right 11-mm single-use trocar placed 10–15 mm lateral of the midline and 5 mm above the level of iliac spine, and a left trocar (reusable, 5 mm) placed slightly inferior compared to the right trocar. Insufflation was performed via Varess needle. A "Visiport" trocar (Medtronic, Parkway, Minneapolis USA) was used to enter the abdomen in patients who had undergone previous laparotomy. A polypropylene "T"-shaped pouch for laparoscopy with 30 cm × 1 cm stripes and widening in the middle (5 cm × 6 cm) was created. From a single sheet of mesh, both tapes and pouches were created for four patients (Fig. 1).

The vesicovaginal space was isolated, and the mesh was rolled and placed inside the body through the 11-mm port. Several resorbable staples were used for the approximate mesh fixation. Four sutures (polyglycolic acid 2–0) were placed on the vagina and tied extracorporeally as the main vaginal support. The peritoneum was fenestrated laterally while holding it with the grasping forceps, and the needle holder was passed extraperitoneally to the middle. Stripes of the mesh were grasped and pulled outside. Continuous "V-Lock" 2–0 (Medtronic, Parkway Minneapolis, USA) absorbable suture was placed from side to side, taking a round ligament in the suture in order to avoid mesh sliding. Additional peritonization was performed after the suture wherever necessary. A small abdominal drain was left after the surgery for one or two days (Video).

The urethral catheter was removed after the second postoperative day, as was the vaginal packing. Cure of incontinence was defined when a stress test after surgery was negative and/or there was no need for everyday pad use. Prolapse was cured when the postoperative POPQ values were 0–1. Statistics were performed using a Yates correction of the Chi-square test.

Results

The minimum follow-up was 18 months. Basic data about the patients are shown in Table 1.

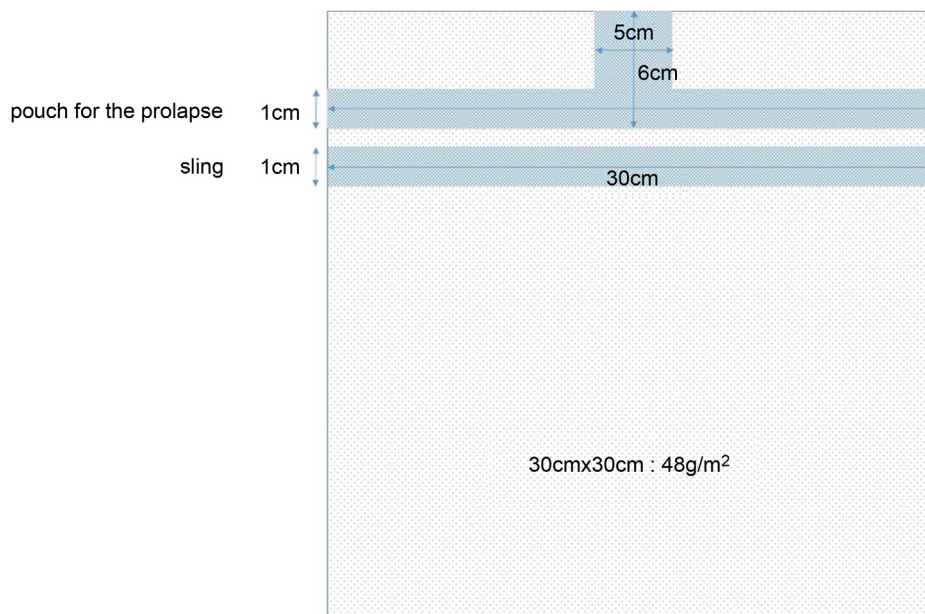


Figure 1. Tailoring scheme of the polypropylene mesh (30 cm × 30 cm, 48 g/m²) both for the sling and vaginal support.

Download English Version:

<https://daneshyari.com/en/article/3919283>

Download Persian Version:

<https://daneshyari.com/article/3919283>

[Daneshyari.com](https://daneshyari.com)