Postoperative urinary stress incontinence after Le Fort colpocleisis

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Abstract

A 72-year-old woman, gravida 4 and para 2, came to our hospital with symptoms of pelvic prolapse. Pelvic examination was performed by a gynecologist and she was diagnosed with prolapse of the uterus. A pessary was inserted into the vagina for conservative treatment. As a result, the symptoms of uterine prolapse improved, but urinary urgency and stress incontinence appeared. The patient requested radical surgery, so we performed Le Fort colpocleisis. The surgery was completed successfully and she was discharged with well-healed wounds ten days later. Two weeks later urinary urgency and stress incontinence were developed. A second surgery, using TOT (transobturator tape) were performed by urologists. As a result, the symptoms of urinary incontinence disappeared. We therefore report that combined treatment with colpocleisis and TOT is possible.

Key words: urinary stress incontinence, pelvic organ prolapse, Le Fort colpocleisis, transobturator tape (TOT)

Introduction

Stress urinary incontinence (SUI) was first reported by Symmonds in 1961, and it is accompanied by pelvic organ prolapse (POP) in many cases. SUI is diagnosed in about 50-70% of incontinent woman, but only incontinence can be improved by surgery.

Colpocleisis is the closure of the vagina by approximation of the anterior and posterior vaginal walls. The patient must be apprised of the fact that she will no longer possess a functioning vagina. Total colpocleisis is for patients who do not have a uterus and have complete vaginal vault prolapse and Lefort colpocleisis for patients who still have a uterus. Total colpocleisis procedure is often coupled with a sling procedure for urinary incontinence such as the TVT sling, TOT sling. Miklos and Dr. Moore were the first surgeons to report on coupling these two procedures in elderly patients utilizing local anesthesia.1

Borstad et al. reported that 22% of patients developed SUI after a Manchester operation.

Previously, Burch colposuspension was considered to be the gold standard surgical treatment, but in recent years, TVT (tension-free vaginal tape) has become an alternative procedure, with a high cure rate, and has gained popularity.2 In this procedure, polypropylene mesh is used to recreate the central urethral support to correct female SUI. According to the original procedure, the tape must be fixed in a position where it can stop urinary leakage caused by cough stress of the patient under local anesthesia. The cure rate is reportedly about 80-90%. Sling operations are being increasingly used as an effective, successful and minimal invasive surgery, but the TVT procedure has been reported to have some complications, such as vessel, bladder and bowel injury. The TOT (trans-obturator tape) procedure has taken the place of conventional sling operations as a less complicated technique. Delorme devised the TOT procedure for the purpose of decreasing the complications of the TVT procedure in 2001.3
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this procedure, the tape is thread through the obturator foramen. The TOT procedure is a less blind technique, with fewer complications, and of a learning curve than the TVT procedure. The short-term cure and improvement rate is reportedly about the same as TVT.1,5

Case Report

A 72-year-old woman, gravida 4 and para 2, presented at our outpatient clinic with symptoms of pelvic prolapse.
Past history: unremarkable
Family history: unremarkable
Menstrual history: menopause at 54 years of age
Pelvic examination revealed a prolapse of the uterus. No cystocele, rectocele, fecal incontinence, or SUI was identified. A pessary was inserted into the vagina for conservative treatment. As a result, the symptoms of uterine prolapse improved, but urinary urgency and SUI developed.

The patient requested radical surgery, so we performed Le Fort colpoplection. The surgery was completed successfully, and she was discharged with well-healed wounds ten days later. Two weeks later, urinary urgency and stress incontinence occurred. Chain CUG revealed expansion of the posterior urethra-vesical angle (PUVA), <Figures 1, 2, 3>.

A second surgery using TOT was performed by urologists. As a result, the symptoms of urinary incontinence disappeared.

The patient has still been keeping the good QOL with no urinary incontinence, fecal incontinence, and POP for 4 years after treatment.

Discussion

SUI frequently merges with POP in the pre- or postoperative period. In clinical practice, gynecologists encounter patients suffering from urinary incontinence despite genital prolapse having been corrected using a pessary. As a consequence of the spread of urogynecology, gynecologists always have to consider the patient’s QOL when selecting the treatment strategy for urinary incontinence; therefore, it is important that masked SUI is assessed preoperatively.

In this case, however, after the operation (Le Fort colpoplection), masked SUI occurred. We consider that colpoplection may have encouraged the expansion of the posterior urethra-vesical angle (PUVA) by traction of the bladder from below compared with the Manchester operation.
Postoperative urinary stress incontinence after Le Fort colpopoeisis

For elderly women who do not wish to be sexually active in the future colpopoeisis is a simple, safe, and effective surgical procedure that reliably relieves these women of their symptoms.\textsuperscript{1,6}

It is regrettable that we did not perform the combined treatment of Le Fort colpopoeisis and TOT at the same time. We learned by experience that it is important to predict masked SUI.

There are many arguments for combined surgery for POP and SUI. On the other hand, it is under discussion which operation should be performed first.

We think that using a pessary for a few days or a vaginal pack test is useful to predict postoperative masked SUI.

In the future, if the onset mechanism of SUI is analyzed further and its definite diagnosis is established, the indication for the TOT procedure for POP repair surgery will be further extended.

References