

Female Sexual Function After Trans Obturator Tape Placement for Stress Urinary Incontinence

Üriner İnkontinans için Yapılan Trans Obturator Bant Uygulaması Sonrası Kadın Cinsel Fonksiyonları

Süleyman Yesil¹, Onur Dede², Goksel Hasan Nedim Goktug², Ismail Nalbant², Ufuk Ozturk²,
Abdurrahim Muhammet Imamoglu²

¹Gazi University Medical School, Urology Department, Ankara, Turkey

²Ministry of Health, Ankara Diskapi Yildirim Beyazıt Education and Research Hospital, Urology Department, Ankara, Turkey

ABSTRACT

Objective: To assess the effectiveness of trans obturator tape (TOT) for the surgical treatment of stress urinary incontinence (SUI) on female sexual function.

Methods: We evaluated 34 sexually active patients, who had stress urinary incontinence. Patients sexual function evaluated preoperative and 6 months after operation with Female Sexual Function Index (FSFI) scores.

Results: Statistically significant improvements were seen in daily pad use from 2.4±1.1 to 0.2±0.4 (p value <0.001) and incontinence episodes daily number from 3.3±1.3 to 0.5±0.7 (p value <0.001). FSFI and pain score were compared and results were similar (from 4.8 ± 0.7 to 4.6±0.8 p value 0.52). Preoperative Female Sexual Function Index was compared with after the six months results and significant improvement was carried (from 15.4±2.5 to 19.4±5.5 p value:0.02).

Conclusions: TOT sling placement was associated with improvements in validated measures of sexual function.

Key Words: Stress urinary incontinence, surgery, sexual function

Received: 10.01.2013

Accepted: 10.24.2013

ÖZET

Amaç: Trans obturator bant yönteminin stres üriner inkontinansı olan kadınlarda seksüel fonksiyona olan etkisinin belirlenmesi.

Yöntemler: Stres üriner inkontinansı olan, cinsel aktif 34 bayan hastayı değerlendirdik. Hastaların seksüel fonksiyonları ameliyat öncesi ve 6. ay kadın seksüel fonksiyon indeks skoru ile değerlendirildi.

Bulgular: Günlük ped kullanımında (2.4±1.1 'ten 0.2±0.4'e, p değeri <0.001) ve günlük idrar kaçırma epizotlarında (3.3±1.3'ten 0.5±0.7'e, p değeri<0.001) istatistiksel olarak anlamlı düzelmeler görüldü. Kadın seksüel fonksiyon indeksleri(KSFI) ve ağrı skorları karşılaştırıldı ve sonuçları benzer görüldü (4.8 ± 0.7'ten 4.6±0.8'e, p değeri= 0.52). Ameliyat öncesi KSFI skorları 6. ay sonuçları ile karşılaştırıldı ve anlamlı düzelmeler görüldü (15.4±2.5'ten19.4±5.5'e, p değeri=0.02).

Sonuç: TOT sling konulması seksüel fonksiyonlarda ölçülebilir düzelmeler ile ilişkilendirilebilir.

Anahtar Sözcükler: Cerrahi, seksüel fonksiyon, stres üriner inkontinans

Geliş Tarihi: 01.10.2013

Kabul Tarihi: 24.10.2013

Address for Correspondence / Yazışma Adresi: Suleyman Yeşil, Cevizlidere caddesi 143/26, 06520, Ankara, Turkey, Phone : +903122026243, Fax: +903122026212 E-mail: syesil2003@yahoo.com

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doi: <http://dx.doi.org/10.12996/gmj.2013.33>

INTRODUCTION

Stress urinary incontinence (SUI) is defined as the complaint of involuntary urine leakage on effort without rise in detrusor pressure (1). SUI affects approximately 12.8 to 46% of women (2,3). There are several studies about negative effects of urinary incontinence on individuals sexual life and overall quality of life. This problem as a result of leakage during sexual activity, decreases the frequency of coitus, anorgasmia and dyspareunia (4,5). SUI surgery can improve some complications like mesh exposure, paraurethral banding, voiding dysfunction, dyspareunia that might cause adversely affect postoperative sexual function (6). An innovation surgical management of SUI is the transobturator tape (TOT), which was described by Delorme in 2001 (7). It is a minimally invasive midurethral sling. The impetus for the development of this technique was to reduce the risk of bladder perforation as well as to eliminate the rare. A meta-analysis comparing retropubic and transobturator approach demonstrates similar effectiveness in overall and subjective outcomes (8).

The aim of present study evaluated to influence of TOT procedure for the surgical treatment of SUI on female sexual function.

METHODS

The present study was a retrospective evaluation of prospectively collected data on patients undergoing TOT for the treatment of SUI. Thirty four female patients admitted to our clinic with pure SUI between March 2005 and July 2010. All patients had pure or predominant SUI symptoms and coraleated with cystoscopy and urodynamy. The procedure was performed according to the technique of Delorme (7). Patients removed the foley catheter at home day after surgery. The post-void residual volume was assessed 5-7 days after operation. Patients without need to use a woman pad considered as cure, 1-2 pads as partial cure and patients using over 2 pads as failure. We used a sexual questionnaire of Female Sexual Function Index (FSFI) for considering operation effects. It was filled preoperative and in 6th months after the procedure to the patients. Results were compared and differences were evaluated with Mann Whitney –U test. A two side p value of <0.05 was considered statistically significant.

RESULTS

Mean patient age was 49 ± 10.4. After follow up significant improvement in incontinence outcomes were seen daily pad use from 2.4 ± 1.1 to 0.2 ± 0.4 (p value <0.001) and incontinence episodes daily number from 3.3±1.3 to 0.5 ± 0.7(p value <0.001). FSFI pain score was compared and results were smiliar (from 4.8 ± 0.7 to 4.6 ± 0.8 p value 0.52). There was no serious complication. Mean operation time was 16 min (12-24). The significant statistical improvement is observed when postoperative FSFI levels were compared to the preoperative levels (19.4 ± 5.5 to 15.4 ± 2.5, p value:0.02) (Table 1).

Table 1: Outcomes after trans obturator tape placement of patients with stress urinary incontinance

	Preoperative	Postoperative	p value
Pad test (number/day)	2.4 ± 1.1	0.2 ± 0.4	<0.001
Incontinance episode (number/day)	3.3 ± 1.3	0.5 ± 0.7	<0.001
Female Sexual Function Index score	15.4 ± 2.5	19.4 ± 5.5	0.02
Pain score	4.8 ± 0.7	4.6 ± 0.8	0.52

DISCUSSION

SUI is estimated to affect up to one-third of women older than the age of 18 years, with a median age of 45 years (9). We know the positive influence of incontinence treatment on sexual function was related to the reduction of incontinence during intercourse. Female sexual dysfunction as a clinical term includes a variety of sexual problems. Although 30–50% of women suffer from sexual dysfunction, it was only recently that more medical and clinical researches have focused on the problems related to urologic and gynecologic operations (10,11).

The etiology of changes in sexual function after anti-incontinence surgery is not clear, with various possibilities being explored. Decreased pericoital incontinence has been suggested as a possible benefit to sexual dysfunction and other investigators have explored the possible negative effect of sling placement on clitoral blood flow as related to sexual dysfunction (12,13). Delorme, described a new method of inserting the tape, thus theoretically avoiding some of the complications such as bladder perforation. He showed that there was a high success rate; no bladder perforations and few perioperative complications via the transobturator route, and this procedure was subsequently widely adopted before proper evaluation of its effectiveness and complications. There have been several noncomparative studies that have reported good success rates with TOT of either route.

In contrast, the TOT procedure have no relation to the pelvic plexus branches but there could be a relation to the pudendal nerve. As a consequence, if there is an alteration of the sexual function, it will probably affect the somatosensory pathway of the vulva. However, during recent anatomic studies, the tape was not disturbing the pudendal nerve (14,15). In clitoral sensibility should be an important issue for future studies. Not only the innervation of the clitoris can be disturbed but also the vaginal anatomy as well.

In the TOT study of Lukban 6% (n = 33) of the patients concluded that they were less able to have a sexual relationship (16). Also, 14.9% of the patients experienced vaginal pain, pressure or protrusion. It is interesting that in Lukban’s study, 33% of the patients were better to able to have a sexual relationship and in 61%, it was about the same (16).

Latthe et al. demonstrated pain after TOT placement in 12% of patients (17). However, Jang et al. found no difference between pre-and postoperative pain outcomes overall using the validated FSFI with 36-month follow-up data reported. When a subset analysis comparing TOT and retropubic (RP) slings was performed, greater pain scores were identified in the RP group (18). In our study, FSFI pain score were compared and results were achieved smiliar.

In contrast to painful complaints, the vast majority of published data has not shown a negative effect of sling placement on sexual function. Accordingly, Wadie et al. demonstrated no difference in sexual function as assessed by the FSFI in patients undergoing incontinance surgery (19). Furthermore, some studies have demonstrated sexual function improvement. Arts-de Jong et al. found significant improvement in satisfaction regarding sexual function at 1 year (20). In our study, we asked the patients 19 questions about sexual function. These questions were about desire, arousal, lubrication orgasm, satisfaction and pain. We have found that operation was better able to have sexual relationship.

CONCLUSION

Urinary incontinence is a common problem of the female population and has been negative effect sexual function. We assess this study as TOT placement is associated with improvements in validated measures of sexual function .

Conflict of Interest

No conflict of interest was declared by the authors.

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