

A Review of Our Experience in Trans Obturator Tension Free Vaginal Tape Surgery in 16 Patients

Kadir BAKAY¹, Davut GÜVEN²

Samsun, Turkey

OBJECTIVE: We aim to share our surgical experience in 16 patients that were complaining of genuine stress urinary incontinence, in which trans obturator tension (TOT) free vaginal tape procedure was performed.

STUDY DESIGN: 16 patients complaining of genuine stress incontinence were admitted into the study group. Patients were all multiparous with a mean age of 36 ± 3 . All patients were carefully examined and urodynamically tested for diagnosis. After getting positive results as genuine stress incontinence, surgery was planned. Patients were operated using outside-inside TOT technique.

RESULTS: All patients except for one were found to be completely cured of stress incontinence in the reevaluation period. Urogynecological examinations and urodynamical tests were performed to objectively confirm these findings. Therefore our objective cure ratio in 16 patients is found to be 93.75% as well as our subjective cure ratio.

CONCLUSION: TOT is described as a minimally invasive procedure that can be performed even under local anesthesia to an outpatient which is an effective and easy to learn surgical technique.

Key Words: Trans obturator tension, Incontinence, Tension free, Vaginal tape, Urinary, Trans obturator
Gynecol Obstet Reprod Med 2013;19:100-102

Introduction

Urinary incontinence is described by the International Continence Society as an involuntary urinal discharge that can be objectively proved to cause hygienic and social problems.^{1,2}

Urinary incontinence should always be taken for serious whenever it is encountered in a woman's life and carefully studied using necessary urogynecological diagnostic measures to identify the underlying pathology and to act accordingly to provide an effective and appropriate treatment modality.³

Therefore it is of utmost importance to distinguish between incontinence types in diagnosis, of which, treatment is totally different, for each subtype.⁴

Approximately in 95% of incontinence patients the main

reasons are urethral sphincter deficiency or unwanted detrusor contractions.⁴

Conservative options like medical treatment, pelvic and periurethral/peri urethral muscle physiotherapy, mechanical devices and behavioral therapy can be described along with surgical procedures that are used in urethral sphincter deficiency but there is still no consensus on which treatment modality should be used primarily on these patients.⁵

Therefore it is very important to decide which kind of surgical operation should be performed along with a careful study of the underlying pathophysiology using specific urogynecological diagnostic procedures to decide on the type of incontinence.

Here in this study we aim to share our surgical experience in 16 patients that were complaining of genuine stress urinary incontinence, in which trans obturator tension free vaginal tape procedure (TOT) was performed.

Material and Method

16 patients complaining of genuine stress incontinence were admitted into the study group. Patients were all multiparous with a mean age of 36 ± 3 . Urinary culture tests were performed to rule out any infectious cause; also patients were selected from the pre-menopausal period to rule out incontinence due to vaginal atrophy. All patients were carefully

¹ Department of Obstetrics and Gynecology Private Hospital, Samsun

² Department of Obstetrics and Gynecology Faculty of Medicine Ondokuz Mayıs University, Samsun

Address of Correspondence: Kadir Bakay
Department of Obstetrics and
Gynecology, Private Hospital
drkadirbakay@gmail.com

Submitted for Publication: 25. 05. 2013

Accepted for Publication: 10. 07. 2013

examined and urodynamically tested for diagnosis. After getting positive results as genuine stress incontinence, surgery was planned. Patients were operated using outside-inside TOT technique. All patients were recalled for urogynecological examination to reevaluate the surgical outcomes in 1 month and 3 months after operation respectively.

Results

Patients were all multiparous with a mean age of 36±3. Patients were all discharged from hospital after day 1 of the operation, operation; no significant blood loss was noted. All patients except for one were found to be completely cured of stress incontinence in the reevaluation period. Urogynecological examinations and urodynamical tests were performed to objectively confirm these findings. Therefore our objective cure ratio in 16 patients is found to be 93.75% as well as our subjective cure ratio. One patient was found to have her vaginal fornix perforated with the mesh used, rendering the operation ineffective. Said patient was reoperated and fully cured.

Discussion

TOT is described as a minimally invasive procedure that can be performed even under local anesthesia to an outpatient. In this procedure sub-urethral anatomic reinforcement and suspension is provided without needing to reposition the bladder or the need to hook up the peri urethral tissue to the pelvic structures as if in a Burch operation.⁶

Klutke JJ mentioned that in a similar procedure that backs up and suspends sub-urethral anatomy, urethral resistance tends to rise in patients while urinating, resulting in continence.⁷

TOT as a procedure has the advantage of being able to be performed over patients that had been previously operated due to incontinence using different techniques and it is an operation that can be combined with other gynecological operations such as hysterectomy.⁸⁻¹⁰

Aside from that it has advantages such as shorter hospital stay, short term catheterization, shorter operational times along with an easier technique and lower complication rates and fewer blood lossless blood loss. Since it is usually performed under local or regional anesthesia it gives the surgeon the chance to evaluate the success of the operation per operatively to determine if continence had been achieved hence improving cure rates dramatically.

Conclusion

Finally it can be safely concluded that TOT is an effective

and easy to learn surgical technique that has significant lower rates of complication and many other advantages including shorter hospital stay, short term catheterization, shorter operational times along with an easier technique and lower complication rates and fewer blood loss and dramatically higher cure rates when compared to other techniques in terms of treating stress incontinence.

Onaltı Hastada Trans Obturator Vajinal Bant Ameliyatı ile İlgili Deneyimlerimiz

AMAÇ: Bu çalışmada objektif kriterlerle stres inkontinans tanısı konmuş 16 hastaya yapılan trans obturator vajinal bant ameliyatıyla ilgili deneyimlerimizi paylaşmak istedik.

GEREÇ VE YÖNTEM: Stres inkontinans tarifleyen 16 hasta çalışma grubuna alındı. Hastaların tümü multipar olup ortalama yaş 36 yaş 36±3 idi. Tanı için tüm hastalar detaylı bir şekilde ürodinamik olarak muayene edildi. Hastalar, tanı konduktan sonra dıştan içe trans obturator bant (TOT) yöntemiyle ameliyat edildi.

BULGULAR: Takip döneminde, ürojinekolojik ve ürodinamik muayenelerle bir hasta dışında tüm hastaların tedavi edildiği görüldü. Bu durumda 16 hastadan oluşan bu seride objektif ve subjektif tedavi oranı %93,75 olarak belirlendi.

SONUÇ: TOT lokal anestezi altında dahi yapılabilen, öğrenimi kolay ve efektif bir cerrahi teknik olarak kabul edilebilir.

Anahtar Kelimeler: Tot, İnkontinans, Vajinal bant, Ürojinekoloji, Trans obturator

References

1. Abrams P, Blavias JG, Stanton SL, Anderson JT. The Standardization of terminology for lower urinary tract function. Br J Obstet Gynaecol 1990;97:1-16
2. Kelleher C. Epidemiology and classification of urinary incontinence. In: Urogynecology Cordozo L, Curchill Livingstone, NewYork 1997:P:3-26
3. Yalçın ÖT. Ürojinekoloji. In: Temel Kadın Hastalıkları ve Doğum Bilgisi. Kışnişçi H, Gökşin E, Üstay K. Güneş Kitapevi Ankara 1996: p: 730-747
4. Weber AM, Taylor RJ, Wei JT, Lemack G, Piet Monte MR, Walters MD. The cost effectiveness of preoperative testing for stress urinary incontinence in women. BJU Int 2002;89:356-63
5. Bergman A, Elia G. Three surgical procedures for genuine stress incontinence. Five year follow up of a prospective randomized study. Am J Obstet Gynecol 1995:173:66-72.
6. Burch JC. Cooper's ligament urethrovesical suspension for urinary stress incontinence. Am J Obstet Gynecol 1968:100:764-72.

7. Klutke JJ, Klutke CG, Carlin B. Altered voiding after the tension free vaginal tape procedure, is increase resistance the mechanism of therapy? *Obstet Gynecol* 2000;95:55.
8. Liapis A, Bakas P, Creatsas G. Burch colposuspension and tension free vaginal tape in the management of stress urinary incontinence in women. *European Urology* 2002;41:469-73.
9. Ward K, Hilton P, Browning J. A randomized trial of colposuspension and tension free vaginal tape for primary genuine stress incontinence. *Neurourol Urodynam* 2000;19:385-6.
10. Peschers U, Tunn R, Buczkowski M, Perumlhini D. Tension free vaginal tape for the treatment of stress urinary incontinence. *Clin Obstet Gynecol* 2000;43:670-5.