Short Communication ISSN 2077-5628

# Female Stress Urinary Incontinence; Clinical Results in 18 Women Treated By Trans-Obturator-Tape

Naser Alfagih<sup>®</sup>, Abdulghany Hussien, Ali Alshafie, Abdulfatah Almoshaty, Mohamed Almontasser and Saliem Abuaniza

Department of Urology, Tripoli Medical Center, Libya

Received 15 October 2014/Accepted 25 November 2014

#### ABSTRACT

The aim of the study was to assess the efficacy and safety of a new minimally invasive surgical procedure using the Trans-Obturator-Tape (TOT) to treat female stress incontinence in Libya.

Eighteen women with stress incontinence underwent the TOT procedure, one day surgery (March 2006 to March 2009). Two patients were previously operated on for incontinence. Sixteen patients were first time operated on. Mean age was 57.5 years (38-77). Eight patients were having mixed incontinence. The surgical placement technique utilizes a trans-obturator percutaneous approach and sexual intercourse avoided post operatively for 4 weeks. All patients underwent post-operative clinical examination, cough-stress test (full bladder) and post-voiding residual assessment.

Mean follow up was ten months. At first month follow-up 90% of the patients were completely cured, 9% were improved within three months, one patient improved completely after six months (she had sexual intercourse on the fifth day post operative). No post-operative complication was seen.

Conclusion: Trans-Obturator-Tape is an effective and safe technique for the treatment of female stress urinary incontinence as compared with the other procedures.

Keywords - Stress urinary incontinence; Trans-Obturator-tape; Minimal invasive surgery; Quality of life.

## INTRODUCTION

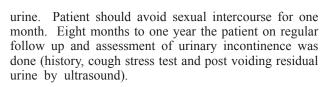
Stress urinary incontinence (SUI) can be described as an involuntary urine leakage upon exertion, sneezing or coughing and is a common problem associated with decreased quality of life (QOL).<sup>1-4</sup> In contrast, urge urinary incontinence (UU) is defined as involuntary loss of urine associated with urgency.<sup>3-5</sup>

More recently, a new minimally invasive surgery was described in which tape is placed through the Obturator foramen and under the mid urethra with less morbidity and cost <sup>6-12</sup>, the treatment of SUI by a trans Obturator tape (TOT) may improve body image by reducing urinary leakage and sexual satisfaction could be expected.<sup>13-14</sup>

## MATERIALS AND METHODS

Eighteen women with stress urinary incontinence aged 38 to 77 years (mean age 57.5 years) underwent TOT operation from March 2006 to March 2009 as one day surgery. Two cases were previously operated on for SUI and 16 patients were first time. Preoperative evaluation of patients was done by the cough test and urodynamic study was performed according to the standards recommended by international continence society.

Surgical placement technique utilizes trans Obturator percutaneous approach under general anesthesia, all patients underwent post operative clinical examination, cough-stress test (full bladder) and post-voiding residual



#### RESULTS

Mean follow up was ten months. At first month follow up 90% of the patients were completely cured and 0.9% were improved within three months, one patient improved completely after six months (she had sexual intercourse on the fifth day post operatively). No postoperative complication was seen.

#### DISCUSSION

The risk factors of stress urinary incontinence including age, child birth, obesity and in general is affected by menopause.<sup>8,15-18</sup> Our study showed the efficacy and safety of TOT we found a success rate of 90% at the first month and the rest during 3 and 6 months which goes with other studies that were reported 80-90% objective efficacy against SUI after 12 months.<sup>8,16,19-23</sup> The potential to reduce the risk of bladder and bowel perforation in trans vaginal tape (TVT) and both procedures show similar post operative outcome while TOT had lower peri operative complication.<sup>10,16,19-22</sup>

In this study, women were satisfied with the procedure as it was a day case surgery, had good results and improved QOL and that is consistent with other studies.<sup>1-5,10-12,22-24</sup>



tmİ

Perineal pain was reported, was transient and resolving within the first month.  $^{\rm 25,26}$ 

There are some limitations of this study; firstly our study group was small, mean follow up was10 months and no knowledge about desire, pleasure, sexual intercourse and orgasm.

In other studies, a systemic review and meta analysis about the impact of incontinence surgery on sexual function were carried out. Eighteen studies which were carried out on 1578 women showed, that there was no change in the overall sexual symptoms after surgery (55.5%).<sup>13,14,24-26</sup> This study has shown an improvement in sexual satisfaction.

## CONCLUSION

The Trans Obturator Tape (TOT) is an effective and safe technique for treatment female stress urinary incontinence because of a shorter surgical time, lower complication rate and improvement of quality of life.

## REFERENCES

- 1. Minassian VA, Drutz HP and Al-Badr A (2003) Urinary incontinence as a worldwide problem, *International Journal of Gynecology and Obstetrics* **82**(3) 327-338.
- 2. Delorme E (2001) Transobturator urethral suspension a minimally invasive procedure to treat female stress urinary incontinence, *Progres en Urologie* **11**(6), 1313.
- 3. Abrahams P, Blaivas J and Stanton S (1988) The standardization of terminology of lower urinary tract function, *Scan J Urol Nephrol.* 114-115.
- 4. International-Continence-Society (1977) Standardization of terminology of lower urinary function, *Urol.***9**, 237.
- 5. Mitteness LS (1987) The management of urinary incontinence by community-living, *The Gerontologist* **27**(2), 185-193.
- 6. Canete P, Ortis E, Domingo S and Cano A (2013) Transobturator suburethral tape in the treatment of stress urinary incontinence: Efficacy and quality of life after 5 year follow up, *The European menopause journal*, **74**(2), 166-171.
- Magon N and Sanjivchopra V (2012) Transobturator tape in treatment of stress urinary incontinence; it is time for a new Gold standard, *North Amj Med Sci.* 4, 226-230.
- 8. Delorme E (2001) Transobturator urethral suspension: Mini-invasive procedure in the treatment of stress urinary incontinence in women, *Prog Urol.* **11**, 1306-1313.
- 9. Arts-de Jong M, Van Altena AM, Aalders CIM, Dijkhuizen FPHLJ and Van Balken MR (2011) Improvement of sexual function after transobturator tape procedure in women with stress urinary incontinence, *Gynecological Surgery* **8**(3), 315-319.
- Haylen BT, De Ridder D, Freeman RM *et al.*, (2010) An International Urogynecological Association (IUGA) International Continence Society (ICS) joint report on the terminology for female pelvic floor dysfunction, *Neurourology and Urodynamics* 29, 4-20.
- 11. Novara G, Artibani W, Barber MD *et al.*, (2010) Updated systematic review and meta-analysis of the comparative data on colposuspensions, pubovaginal slings, and midurethral tapes in the surgical treatment of female stress urinary incontinence, *Official Journal of the European Association of Urology* **6**, 218-238.

- Cody J, Wyness L, Wallace S, Glazener C, Kilonzo M, Stearns S, McCormack K, Vale L and Grant A (2003) Systematic review of the clinical effectiveness and costeffectiveness of tension-free vaginal tape for treatment of urinary stress incontinence, *Health Technology Assessment* 21, 1-189.
- Sentilhes A, Berthier R, Caremel C, Loisel L, Marpeau L and Grise P (2008) Sexual function after transobturator tape procedure for stress urinary incontinence, *Urology*, 71(6), 1074-1079.
- Api M, Api O, Gorgen H, Cetin A and Yayla M (2005) New diagnostic instrument for sexual function assessment in menopausal women libido scoring system, *Journal of the Turkish German Gynecology Association* 6(1), 24-29.
- 15. Waetjen LE, Feng Ye, WY *et al.*, (2009) Study of Women's Health across the Nation (SWAN) Association between menopausal transition stages and developing urinary incontinence, *Obstetrics and Gynecology* **114**, 989-998.
- Fernandez BP, Garcia-Cenador MB, Garcia AG *et al.*, (2013) Results of the surgical correction of urinary stress incontinence according the type of transobturator tape utilized, *Archivio Italiano di urologia e Andrologia* **85**(3), 149-153.
- Gambirasio IK, Jacob S *et al.*, (2009) Complications associated with transobturator sling procedures: analysis of 233 consecutive cases with a 27 month's follow up, *BMC Women's Health* 9, 28.
- 18. Ballester M, Bul C, Frobert JL. *et al.*, (2012) Four-year functional results of the suburethral sling procedure for stress urinary incontinence: a French prospective randomized multicentre study comparing the retropubic and transobturator routes, *World Journal of Urology* **30**, 117-122.
- 19. Liapis A, Bakas P, and Creatsas G (2010) Efficacy of inside-out transobturator vaginal tape (TVTO) at 4 years follow up, *European Journal of Obstetrics, Gynecology, and Reproductive Biology* **148**, 199-201.
- 20. Goode PS, Burgio KL, Richter HE and Markland AD (2010) Incontinence in older women, *JAMA* **303**, 2172-2181.
- 21. Juma S and Brito CG (2007) Transobturator tape (TOT): two years follow up, *Neurourology and Urodynamics* 26, 37-41.
- 22. Gilberti CF, Cortese P, and Schenone M (2007) Transobturator tape for treatment of female stress urinary incontinence: objective and subjective results after a mean follow up of two years, *Urology* **69**, 703-707.
- 23. Heider S (2011) Female incontinence: long-term results of slings, *Current Opinion in Urology* **21**, 488-492.
- 24. Jha S, Ammenbal M, and Metwally M (2012) Impact of incontinence surgery on sexual function: a systemic review and meta-analysis, *Journal of Sexual Medicine* **9**(1), 34-43.
- 25. Raziye N, Hakan N, Mehmet A, Hakan A and Murat A (2013) An evaluation of the effects of the Transobturator Tape procedure on sexual satisfaction in women with Stress Urinary Incontinence Using the Libido scoring system, *ISRN Obstet Gynecol.* **2013**, 627671.
- 26. Krauth JS, Rasoamiaramanana H, Barietta H, Barrier PY, Grisard-Anaf M, Lienhart J, Mermet J, Vautherin R and Frobert JL (2005) Sub-urethral tape treatment of female urinary incontinence-morbidity assessment of the transobturator route and a new tape (I-STOP): a multicentre experiment involving 604 cases, *Eur Urol.* **47910**, 102-106.

