

## **USE OF POLYPROPYLENE MESH AS SPIRAL TRANS OBTURATOR TAPE IN MANAGEMENT OF FEMALE INCONTINENCE DUE TO NONFUNCTIONAL URETHRA.**

Hypothesis / aims of study: Female patients with failed anti-incontinence surgeries or female patients with intrinsic sphincter deficiency (ISD) are unique surgical challenge. We present a technique that provides circumferential coaptation of the urethra as a salvage procedure in those patients.

### Study design, materials and methods

20 female patients with nonfunctional urethra are prospectively evaluated. Preoperative evaluation included history, physical examination and urodynamic evaluation including voiding cystometry, urethral pressure profile and VLPP. Manual fashioned polypropylene mesh with a central part 1.5x3.0 cm was prepared from 30x30 cm polypropylene mesh. Zero polyglactin sutures were fixed at each end. The central part was fixed against the proximal urethra near the bladder neck by 3/0 vicryl to avoid rolling or migration of the tape. Both ends of the tape were crossed at the dorsal aspect of the urethra creating a complete circle around the urethra. The terminal sutures were passed through the obturator foramen as the original TOT. Stress test was done before cutting both terminal ends of the tape. Urethral catheter was left for four days. The surgical outcome was determined objective and subjective methods and quality of life. The follow up visits were performed at 1, 3, 6 months.

### Results:

The age ranged from 26- 53 ys. 18 patients (90%) were completely cured in the first visit. One patient showed partial improvement. The other patient was complaining of difficulty of micturation that was relieved by urethral dilation. No urethral erosions or vaginal one.

### Interpretation of results

the success rate of our results is due to narrowing of the urethral lumen by coaptation of its mucosa that make a resistance. The use of polypropylene mesh at the bladder neck and proximal urethra decreases the incidence of erosion due to bulky external urethral sphincter and bladder neck region. In comparison to cure rate of pubovaginal sling and other anti-incontinence surgeries that were 80 -90% for genuine stress incontinence and not for ISD or recurrent cases, our results are nearly equal to others.

### Concluding message

Use of manually designed polypropylene mesh as spiral TOT in management of difficult cases of female stress incontinence is considered as simple, cheap, safe and effective minimally invasive technique.

### References

- 1- kuotk: Anatomical and functional results of pubovaginal sling procedures using polypropylene mesh for treatment of stress incontinence. J.Urol., 166:152,2001.
- 2- Abdel-Fatah M., Barrington J.W and Avunkalaivanan A.S: Pelvical pubovaginal sling versus tension free vaginal tape for treatment of urodynamic stress incontinence. A prospective randomized 3-year follow-up study. Eur. Urol., 46:629, 2004.

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**HUMAN SUBJECTS:** This study did not need ethical approval because we evaluate the efficacy of previously approved surgical technique. but followed the Declaration of Helsinki Informed consent was obtained from the patients.