

## *Summary*

This study was done for evaluation of TVT secur compared to TVT used for surgical treatment of female stress urinary incontinence.

Between April 2008 to May 2009, at urology department in Benha University Hospital , 60 female patients complaining of genuine SUI, were included in this study. They were randomly divided into 2 groups:

**Group I:** included 30 patients managed by TVT secur.

**Group II:** Included 30 patients managed by TVT.

All patients were evaluated preoperatively by history, physical examination, routine preoperative laboratory investigations including urine analysis , culture and sensitivity if needed, abdomino- pelvic ultra sound with estimation of post-voiding residual urine and urodynamic investigations in the form of : free flowmetry, cystometry with assessment of valsalva leak point pressure .

Our results were subjected to detailed statistical analysis and we found that:

In TVT secur group: The mean age was  $39.8 \pm 11.1$  years, 60% of patients had GI SUI, while the rest had GII, 27 cases had Grade I cystocele , while 1 case had GII and 2 cases had no cystocele. The mean operative time ( $\pm$  SR) value was  $13.53 \pm 3.42$  minute, while the mean blood loss ( $\pm$  SR) value was  $72 \pm 19.5$  ml. No intra operative complications . None of the patients needed recatheterization or had complications in the form of bladder perforation or vaginal erosions. 80% were cured , 16.7% were improved, while 3.3% failed.

In the TVT group: The mean age ( $\pm$  SR) value was  $41.1 \pm 10.1$  years. 53.4% of the patients had Grade I SUI, 43.3% had G II SUI, and

3.3% had G III SUI..26 cases had GI cystocele, while 2 cases had GII cystocele, and 2 cases had no cystocele . The operative time ( $\pm$  SR) value was  $25.47 \pm 3.28$  minute, while the mean blood loss ( $\pm$ SR) value was  $106.7 \pm 22.5$  ml. Intra operative complications in the form of bladder perforation occurred in 4 patients. Postoperatively 3 patients need recatheterization, vaginal erosion occurred in 2 cases, also urethral erosion occurred in 2 cases. 76.7% of patients were cured , 16.7% of patient were improved and 6.7% of patients failed.

There was insignificant difference between both group regarding age, mode of delivery, parity, grade of SUI.

There was statistically significant difference between both group regarding operative time, intraoperative bleeding and hospital stay which was less in TVT secur procedure.

There was statistically insignificant difference between both group regarding the cure, improvement and failure rate.