

Summary

The hysterectomy operations for benign gynecological disease are the most common major operations in gynaecology. Urological dysfunction and stress incontinence after hysterectomy have been issues of a number of controversial discussions and publications. These sources lack comparative studies, distinguishing various surgical techniques, diagnostic methods and follow up periods. Further more, almost all of the hysterectomized patients are in their perimenopausal periods, augmenting the symptoms and making the assessment more difficult.

The stress urinary incontinence with symptoms of urine leakage related to an increase in abdominal pressure can be explained by poor pressure transmission to the urethra due to hyper mobility of the bladder neck or in an insufficient closure function of the urethra itself.

However, studied comparing preoperative urodynamic finding and post operative finding are very few, since many urologist and gynaecologists have investigated the effect of different mode of hysterectomy on urinary bladder and urethral functions. There is no study showing severe negative effect of these operations on urethra and urinary dysfunction

This study done to examine whether hysterectomy with its different mode is an independent risk factor for stress urinary incontinence particularly and other LUTS.

In Benha Gynaecology and Urology Department, 60 female patients prepared for hysterectomy were included. In this study, they were divided into 3 groups:

- Group I: included 20 patients underwent SAH.
- Group II: included 20 patients underwent TAH.
- Group III: included 20 patients underwent VH.

All patients were evaluated preoperatively by history, physical examination, urodynamic investigations in the form of maximum flow rate, maximum cystometric capacity and valsalva leak point pressure.

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

- Simple hysterectomy either abdominal (total or subtotal) or vaginal doesn't increase symptoms of urinary incontinence or voiding difficulties with short term follow up.
- Cases underwent SAH and complained from SI after operation at 2 months 10% showed reduction to 5% with follow up to 1 year.
- Cases underwent VH complained from SI (15%) before operation showed reduction to 5% after hysterectomy with development of 2 new cases (10%).
- 1 Case underwent TAH complained from SI (5%) post operative showed no improvement with follow up till 1 year of follow up.
- No statistical differences in the LUTS on clinical or urodynamic base before and after the operation.
- Normal patients developed SI after surgery with VLPP ≥ 90 cm H₂O were cured with follow up up to one year while patients with SI

before surgery with $VLPP \geq 100$ were cured after surgery and vice versa but we need more numbers of patients for more documentation.