

RANDOMIZED PROSPECTIVE TRIAL COMPARING BURCH COLPOSUSPENSION TO TENSION FREE VAGINAL TAPE AND TRANSOBTURATOR SUBURETHRAL TAPE PROCEDURES IN TREATING FEMALE GENUINE STRESS URINARY INCONTINENCE

Hypothesis / aims of study

To assess and to compare, Burch colposuspension operation, suburethral tension free vaginal tape (TVT), and Suburethral transobturator tape (TOT) procedures, as a primary surgical treatments for urodynamically proved genuine stress urinary incontinence (GSUI) in females, as regards operative simplicity, operative safety, and operative efficacy, in order to conclude which procedure that represents the simplest, safest, and most effective primary surgical correction for female GSUI.

Study design, materials and methods

This study is randomized prospective trial in which 75 patients with the diagnosis of urodynamic GSUI were randomized into three equal groups. Group (1), included patients who underwent Burch colposuspension (n=25); group (2), included patients who underwent TVT procedure (n=25); group (3), included patients who underwent TOT procedure (n=25). All patients' characteristics, following randomization and operative details were compared among the three groups to evaluate operative simplicity. Patients were also followed up 2 weeks and 6 months following the primary surgical procedure to evaluate operative safety as assessed from perioperative complications, including symptoms of voiding dysfunctions, as well as to evaluate operative efficacy as assessed from the objective cure rates and patients' satisfaction with the results.

Results

No significant difference between patients in the three groups, as regard preoperative clinical characteristics following randomization. The TOT procedure has been proved to be the simplest operation as regards, type of anesthesia, duration of the procedure, hospital stay and return to normal activity. The perioperative complications associated with TOT procedure were negligible and potentially less serious than those associated with either TVT procedure or Burch colposuspension operation.

Interpretation of results

The difference between the three surgical procedures, as regards cure rates, was not shown. The objective cure rates however, were comparable between the three procedures at 6 months follow up period ($P>0.05$). The perioperative complications associated with TOT procedure were negligible and potentially less serious than those associated with either TVT procedure or Burch colposuspension operation. The objective cure rates however, were comparable between the three procedures at 6 months follow up period ($P>0.05$).

Concluding message

Suburethral tape insertion either through the retropubic space (TVT) or the transobturator route (TOT) is the preferred primary surgical treatment for female genuine stress urinary incontinence. The transobturator route (TOT) is a further simplification of TVT procedure which combines simplicity, with similar outcomes and an additional advantage of preventing the potential complications. TOT procedure is thus recommended to represent the best method for suburethral tape insertion as a primary surgical treatment. Larger randomized prospective study is yet, to be conducted with a longer follow up period to assess the durability for the three procedures.

References

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<i>Was the Declaration of Helsinki followed?</i>	No
<i>This study did not follow the Declaration of Helsinki in the sense that</i>	not submitted
<i>Was informed consent obtained from the patients?</i>	Yes