

PROGNOSTIC FACTORS FOR TRANSOBTURATOR SLING SURGERY FOR FEMALE STRESS URINARY INCONTINENCE

Hypothesis / aims of study

The female stress urinary incontinence (SUI) is an important health problem worldwide with economic and mainly social impact. The sling procedure is the standard treatment for this illness. It is not well established if the prognostic factors that influence the results of retropubic sling can be applied to transobturator sling (TO). The aim of this study is to retrospectively evaluate which preoperative factors can influence the results of transobturator sling surgery for female stress urinary incontinence.

Study design, materials and methods

Preoperative data were collected from the medical chart including age, body mass index (BMI), pregnancies, vaginal deliveries, previous urinary incontinence surgery, obstructive symptoms and urodynamic findings (Valsalva Leak Point Pressure - VLPP, urinary flow, detrusor overactivity - DO). A total of 117 women were treated for SUI using TO with polypropylene mesh (Venkuri®, São Paulo, Brazil). Postoperative objective success was defined as absence of any urinary loss during full bladder standing Valsalva maneuver and no need of pads, while subjective success was achieved when the patients considered themselves much better or cured, the level of satisfaction was ≥ 8 (according to a visual analogic scale from 0 to 10) and there was no report of stress incontinence after surgery. Quality of life was analysed by ICIQ-SF. Statistical analysis was accomplished and the results rendered significant if $p < 0.05$.

Results

The mean age was 53.9 (33-80) years, including 66% postmenopausal women. The mean BMI was 28 (20-41) kg/m². The average of pregnancies and vaginal deliveries was 4 and 2.6, respectively. The preoperative urodynamics showed mean VLPP of 82 cmH₂O (71% over 60 cmH₂O) and 24% had DO. The mean operative time was 22 minutes, 10% had concomitant surgery. The mean follow-up was 13 (3-37) months. The objective and subjective success rates were 90% and 89% respectively. The multi-variated (logistic regression) analysis showed that VLPP, as numerical variable, was the only factor that influenced the results of transobturator sling for SUI ($p=0.016$, figure 1), when analysed as categorical variable (> 60 or ≤ 60 cmH₂O) VLPP had no influence on TO results ($p=0.24$).

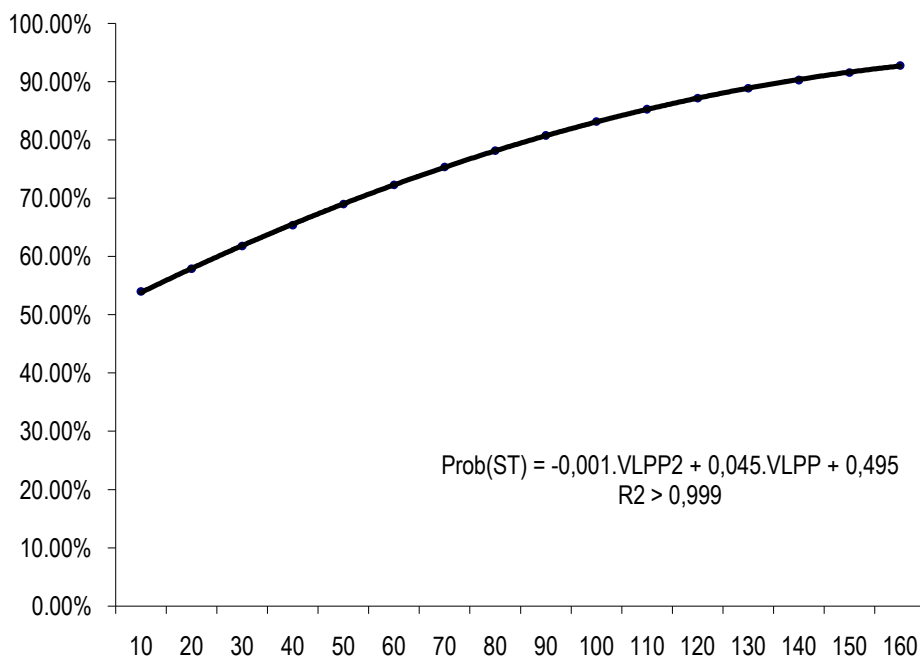


Figure 1) Graphical expression of correlation between VLPP and success probability.

Interpretation of results

The prognostic value of VLPP for transobturator sling is controversial and most authors have stratified VLPP in their analysis⁽¹⁻³⁾. The most interesting finding of this study was that when VLPP was stratified in higher or 60 cmH₂O and less it didn't influence the results, but when it was analysed as a continuous numerical variable, the lower VLPP lower was success probability. A criticism is that urethral mobility was not analysed, since low mobility may coexist with low VLPP and mobility may be a more powerful prognostic factor. Another unexpected finding was that detrusor overactivity didn't influence success rates. This may be related to how well patients are informed about surgical objectives and expectancies.

Concluding message

The only factor that influenced the results of transobturator sling for the treatment of the female stress urinary incontinence was the Valsalva leak point pressure.

References

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<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>Is this a Randomised Controlled Trial (RCT)?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Ipiranga Hospital Ethics Committee.
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes