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ELECTROMIOGRAPHIC SELECTIVE STUDY OF PERIURETHRAL SPHINCTER FOR PRESURGICAL PREDICTION OF SUCCESS ON MALE STRESS URINARY INCONTINENCE SURGERY WITH SUBURETHRAL SLINGS.

Hypothesis / aims of study

Transobturator slings that places bulbar urethra back in his natural, intrapelvic position, has been a revolution in the treatment of stress male urinary incontinence. A good function of periurethral sphincter seems to be important for the success of the intervention.

To evaluate the utility of selective electromyography of periurethral sphincter (EPS) as a tool to predict success or failure of the male stress incontinence surgical correction with transobturator slings.

Study design, materials and methods

47 patients with stress urinary incontinence after prostate surgery were selected between 2004 and 2013. Pre-operative EPS, ICIQ-SF, urethroscopy, pad-test (grams) and body mass index (BMI) were performed in all cases.

In EPS potentials morphology, reflect sphincteric response and voluntary control of the sphincter were measured. Sphincter contractility was assessed in urethroscopy.

Subjective satisfaction and ICIQ-SF were performed postoperatively. Cure rate was defined as no pad use, improvement as use \leq 1 pad per day.

Success rate was compared in terms of the parameters of EPS and urethroscopy, using the chi-square. Correlation between EPS and cystoscopy findings was calculated with Kappa correlation index.

Results

Mean age was 68,28 years (SD 5.44), and median BMI of patients was 26.69 (23.7-33.2). Median pad-test weight was 310 (50-626) grams.

Mean ICIQ-SF score was 19.68 preoperatively, while postoperatively, it turned to a mean of 2.89.

Cure rate was 79% (23/29 patients), with a 10.5% failure rate (3/29) and 10.5% (3/29) of patients whose ICIQ-SF was reduced significantly. Median follow-up were 21 months (1-53).

No correlation was observed between endoscopic findings and EPS parameters (Kappa<0.20).

Interpretation of results

Male incontinence surgery with suburethral slings has satisfactory outcomes.

It was not observed significant correlation for any of the parameters of the EPS relative to the outcome of intervention. Neither we observed statistical relationship between EPS results and urethroscopy findings.

Thus, urethroscopy should be gold-standard to predict success of the surgery till further investigation.

Concluding message

Selective electromyography of periurethral sphincter does not seem to be useful as a tool to predict success on surgical correction of male stress urinary incontinence with suburethral slings.

References

1. Arch Esp Urol. 1998 Oct;51(8):801-10. Spanish.
2. Arch Esp Urol. 1994 Jun;47(5):483-7. Spanish.

Disclosures

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