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BIOFEEDBACK-PELVIC FLOOR MUSCLE TRAINING (BFMT) ON POST-PROSTATECTOMY INCONTINENCE. HOW LONG IS ENOUGH? INITIAL MONOCENTRIC EXPERIENCE

Hypothesis / aims of study

The authors present their experience with biofeedback-pelvic floor muscle training (BFMT) for post-Laparoscopic (Lap) or Open (OS) prostatectomy urinary incontinence (UI), while they also try to determine what is the optimal lengh of time of treatment required for the best recovery/improvement of UI.

Study design, materials and methods

We performed an observational prospective study with a total of 53 patients who underwent OS or Lap RP and were posterior submitted to BFMT once a week plus home exercises (3 times a day) for 12 months. Patients were posteriorly evaluated at week 3 (T3), 6 (T6) or 12 (T12) months postoperatively. With defined continence as losses inferior to 8ml and improvement as a reduction of at least 50% of the losses. We measured the amount of losses with a urinary collector device collection of urine (ml) during a period of 24 hours. We compared the results between the subgroups of patients submitted to Lap RP vs OS RP. The Wilcoxon signed ranks test was used to compare changes in median 24h urine loss and in the force of contraction of the pelvic muscles, between T0 and T3, T6 or T12. The Mann-Whitney U test was used to compare 24h urine loss between the subgroups of patients submitted to Lap vs OS

<u>Results</u>

Patients mean age was 60,08 years-old (alfa: 0,858). 39 (73,6%) patients were previously submitted to OS. First BFMT intervention was at median of 4 (2-84) months after surgery. Median 24h urine losses were T0: 230 (10-1200)ml, T3: 100 (0-830)ml, T6: 60 (0-400)ml, T12: 20 (0-190)ml. Overall improvement/cure was 83,02% (n= 42) at T12 (cure rate 37,74%; n=19). Timming of cure/improvement was T3: 19,05% (n=8), T6: 54,76% (n=23) and T12: 26,19% (n=11). There was also an increase in the force of contraction of the muscles of the pelvic floor between evaluations from T0 to T12. We found no statistically significant difference on the time and degree of recovery between OS an Lap RP.

Interpretation of results

The present results supports the involvement of BFMT on the treatment of UI of the patients submitted to RP. It also suggests that the lengh of treatment should be of at least 6- to 12months since this seems to be the period where the majority the patients are cured/improved. This might be related with the "*Nerve Sprouting Theory*" wich assumes that a patient needs at least 6-months for a "nerve recovery" after surgery. Meanwhile this results need to be confirmed within an larger randomized study or supported

Concluding message

The present data support the use of BFMT on recovery of the urinary continence on the patients submitted to RP. It seems to the authors that a minimum period of 6 to 12months of treatment should be indicated. We also found no difference in the degree and timing of recovery between patients Lap PR vs OS PR.

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