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# CONSERVATIVE THERAPY FOR FEMALE URINARY INCONTINENCE: MEDIUM TERM FOLLOW UP OF A MULTICENTRIC STUDY.

### Aims of Study

The aim of this study is to report medium term follow up results and identify prognostic factors of a pelvic floor re-education protocol, administered in individual or group education, to women treated in three different outpatient clinics.

### <u>Methods</u>

From 1998 to 2002 women underwent to pelvic floor re-education were enrolled in this study. They all had a full urogynaecol history taken, a gynaecol examination performed and a complete urodynamic test. They suffered from GSI, urge or mixed incontinence associated with a moderate grade of genital prolapse ( $\leq$  II grade according ICS standardization). Chart urinary, VAS score, Pad test, cough stress test, and PC test were performed before and after treatment, in accord with ICS definitions. The protocol consisted of three components: individual or group pelvic floor exercises twice per week, biofeed-back control and functional electrical stimulation (FES) three times per week. Finally the patients were encouraged to exercise the physiotherapy at home and all had an objective control examination. A statistical analysis was performed.

### **Results**

Two hundred and twenty-five patients, with a mean age of 52 yrs ( $\pm$ 11.04SD, range 29-74) were included. They lamented urinary incontinence from mean 55 months ( $\pm$ 63.61SD, range 0-360) and had a mean follow up of 7months ( $\pm$ 6.6SD, range 1-36).

The 41.8% out of the population had urodynamic diagnosis of GSI, while the 45.8% of mixed and the 12.4% of urge incontinence.

Before conservative treatment the 56.8% of the women reported a VAS score  $\geq$ 7 while after in the 55.2% a VAS score  $\leq$  a 3 was recorded. This subjective parameter was supported also by the values of stress test, Pad test and PC test following cure.

At the follow up the patients were dry in 44% of the cases, and a comparison between stress test before (45,7%) and after treatment (18.3%) carried out a reduction of 60% in GSI. More than 60% improved their cough stress test class (32% of one class, 11% of two classes and 17% of three or four classes).

The final PAD-test was negative in the 75.9% of the women and in the 38,2% there was a significant decrease of the disturb.

At the control there was no PC test =0 and the 38.4% of patients presented a satisfactory tone, strength and control of the levator ani muscle. Almost 80% of cases got better own PC test level (in 24.1% of two levels and in 5% of three levels).

For each case a final global outcome, based on the results of VAS score, cough stress test, Pad test, PC test, was allotted. The 27.1% out of the patients had an global outcome unchanged or an improvement less than 50%, the 25.8% an improvement more than 50%, and the 47.1% of cases were cured. Objective and subjective results were statistically correlated with history, clinical and urodinamic data.

The percentages of success  $\geq$  50% do not seem to be modify significantly by age, menopausal age (73.6% in fertility age vs 72.3% in menopausal age), and by the kind of urinary incontinence (72.3% in GSI vs 72.8% in mixed vs 75% in urge incontinence). A significant difference of the results was found among the scores of the incontinence, in the analysis both of Pad test (82% for PAD test < 2 g, and 78.9%. for Pad test = 2-10 g. vs 34.8%

for PAD test  $\geq$ 11 g) and of cough stress test (78.9% for mild stress test vs 59.5% severe stress test).

## **Conclusions**

Conservative uro-rehabilitation techniques are efficacy, safe and represent an available choice in the treatment of every kind of female urinary incontinence. The administration of these techniques in different centres by diagnostic and therapeutic comparable protocols allows rate of global improvement about 80%, with 47.1% of cure. As that the kind of urinary incontinence does not modify the success rate, the conservative approach shows evident advantages in comparison with surgery, and opens interesting prospects for therapeutic integration between the two techniques.

### **References**

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