

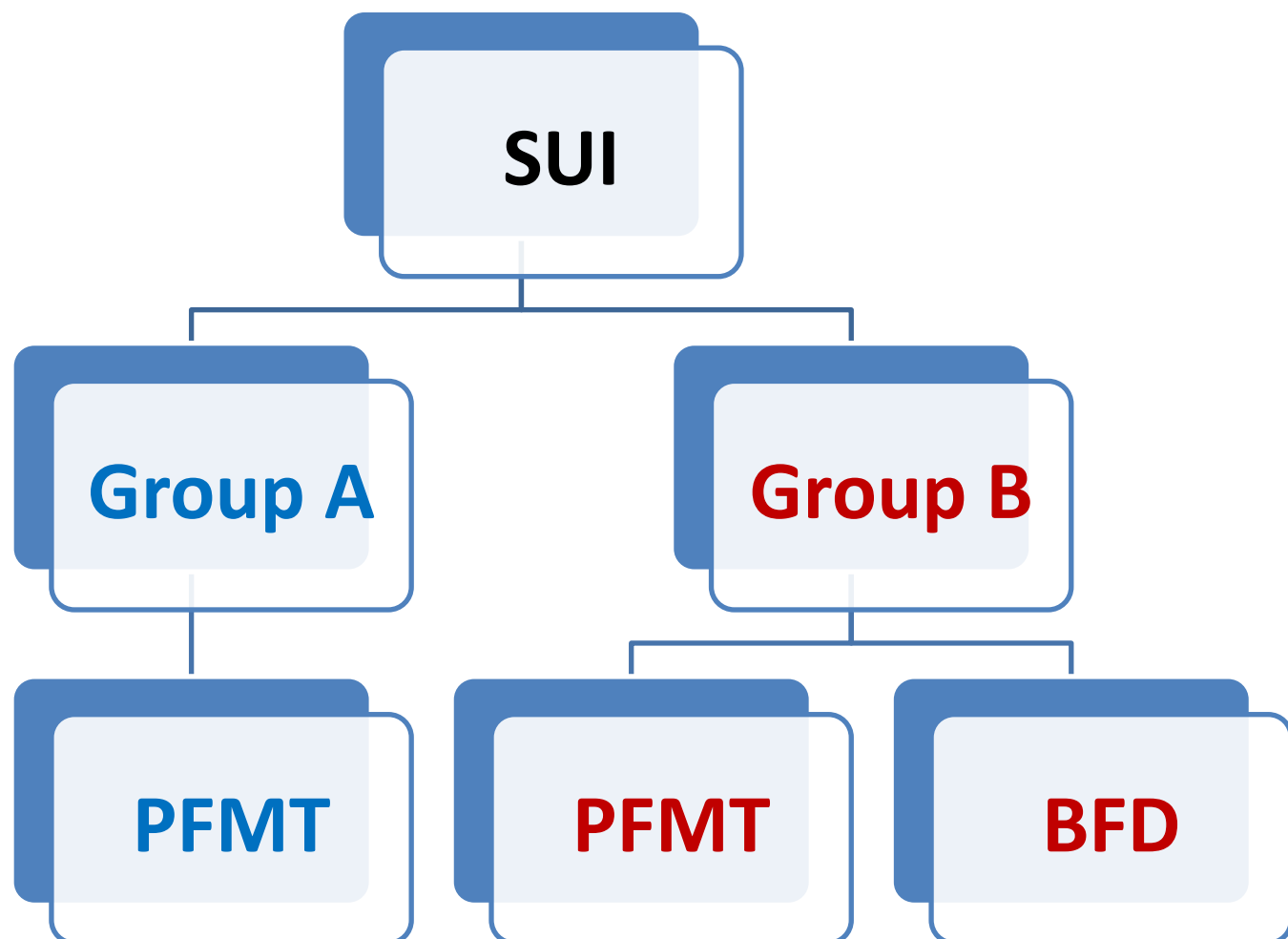
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Introduction

Pelvic floor muscle training (PFMT) has been suggested as the first line conservative treatment for women with stress urinary incontinence (SUI), especially in terms of mild or moderate symptoms. The aim of our study is to examine the effectiveness of this therapeutic management on the parameters of the urodynamic study (UDS).

Methods and Materials

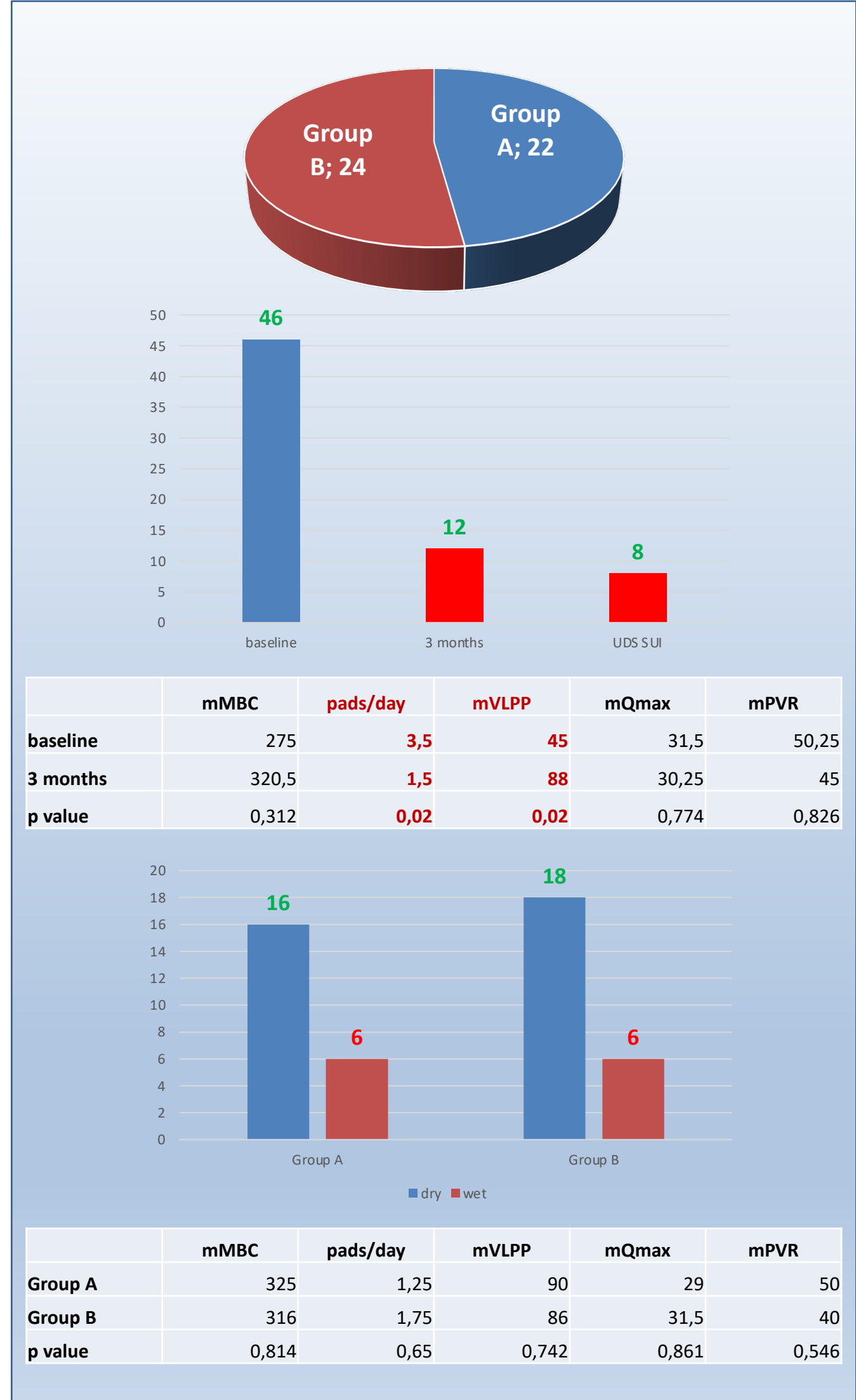
This is an observational study enrolling patients from the urodynamics unit of our hospital. The inclusion criteria were women with SUI already certified with a stress test, naïve of any other treatment. Women with a previous pelvic surgery, co-existing prolapse, with a body mass index over 30 and those with a cognitive disability were excluded. All of them underwent supervised PFMT for 6 months and they all had a UDS at the baseline and 3 months after PFMT. Women under PFMT have been randomized in Group A, while those with biofeedback (BFD) as add-on method were for Group B. UDS has been performed according to the standards of International Continence Society and involved bladder diaries (BD), pad-test, uroflow, bladder scan, cystomanometry and pressure-flow study. Statistical analysis has been performed according to Mann-Whitney test for non-parametric samples and a cut-off value for statistical significance of 0.05 with SPSS v26 (IBM Corp. 2017. IBM SPSS Statistics for Windows. Armonk, NY: IBM Corp.)



- Excluded**
- pelvic intervention
 - prolapse
 - BMI > 30
 - cognitive disability

| Instruments used | Data collected |
|---------------------|----------------|
| pad-test | SUI severity |
| bladder diaries | MBC |
| bladder scan | PVR |
| cystomanometry | VLPP |
| pressure-flow study | Qmax |

Results



Discussion

It should be highlighted that extended and supervised PFMT methods are already suggested for patients with mild to moderate SUI and those who want to avoid surgery. In our study, we followed all the ICS standards in order to evaluate the real and objective efficacy, especially evaluating the urodynamic parameters. It is clear that PFMT strategy is effective and that the add-on treatment of biofeedback is under discussion yet. Moreover, six months of supervised therapy seems to have optimal effects, moderating the severity of SUI symptoms. A possible next step in investigation could be studies with longer follow-up, estimating in parallel the objective changes in the every-day quality of life.

Conclusions

Pelvic floor muscle training offers a positive effect on the urodynamic parameters among women with SUI. On the other hand, the add-on treatment with biofeedback does not seem to give additional benefit, especially after six months of guided therapy.



References

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2. García-Sánchez E, Ávila-Gandía V, López-Román J, et al. What Pelvic Floor Muscle Training Load is Optimal in Minimizing Urine Loss in Women with Stress Urinary Incontinence? A Systematic Review and Meta-Analysis. *Int J Environ Res Public Health*. 2019 Nov 8;16(22):4358.
3. García-Sánchez E, Rubio-Arias JA, Ávila-Gandía V, et al. Effectiveness of pelvic floor muscle training in treating urinary incontinence in women: A current review. *Actas Urol Esp*. 2016 Jun;40(5):271-8.