





Effectiveness of hypopressive exercises in women with pelvic floor dysfunction: a single-blinded randomized clinical trial followed by a qualitative research.

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OBJECTIVES

- 1. To compare three physiotherapy treatment approaches, based on pelvic floor muscle training (PFMT) vs hypopressive exercises vs a combination of both.
- 2. To know the adherence experience of women about home-based exercises 6 months after the end of the treatment.

STUDY DESIGN

This was a single-center, randomized, simple-blinded, 3-armed parallel group clinical trial followed by a quality study consisted on semi-structured individual and group interviews since a phenomenology perspective.

MATERIAL AND METHODS

Ninety-four women with pelvic floor dysfunction were randomly assigned to 8 weeks of either direct PFMT (n= 32), hypopressive exercises (n= 31) or both (n= 31). All interventions were carried out by the same physiotherapist, were individually, and face-to-face in each group.

INTERVENTION GROUPS

- **1. Direct PFMT group:** Pelvic floor muscles exercises guided throw vaginal palpation and intravaginal biofeedback.
- **2. Hypopressive exercises group:** Thirty-three hypopressive exercises described by Dr. Caufriez.
- **3. Mixed group:** PFMT guided throw palpation and biofeedback + hypopressive exercises.

The three groups received the same educational strategy and were instructed in the knack maneuver.

Quality study: Thirty-one women were interviewed. The interviews were recorded, transcribed manually, and thematic analysis was conducted.



RESULTS

The women in the three intervention groups improved their symptoms descending 24.41-41.70 points according to PFDI-20, their quality of life in 12.21-26.69 points based on PFIQ-7 punctuation, and increased their PFM strength in 7.10-10.12 cmH2O. Improvements were maintained after 3, 6 and 12 months after intervention. The adherence to exercise at home reported 12 months after the end of the intervention was below 60%. There were no found differences among arms group. Women expressed that their adherence to PFM exercises depended on the exercise program itself, its efficacy, the personal experiences about the exercises, intrinsic factors of the person, and on extrinsic factors.

INTERPRETATION OF RESULTS

Although the results have been positive for the hypopressive intervention, cautions must be taken. Firstly, the three groups have received the same lifestyle advice, which has defined by itself helpful in the symptoms control of mild pelvic floor dysfunction. Second, all women were instructed in the knack maneuver during perceived intra-abdominal pressures increase, which have also been reported as an effective trick to minimize urinary leakage. Thus, the hypopressive exercises could provide sense of pelvic floor muscles elevation, but without giving a real awareness of pelvic floor muscle contraction, which would be required to perform the knack maneuver correctly. This fact could suppose hypopressive exercises as an insufficient treatment for women who are unable to produce a conscious movement of pelvic floor muscles.

CONCLUSIONS

Individual physiotherapy treatment based on PFMT or on hypopressive exercises is effective in the symptoms management and in the improvement of pelvic floor muscles strength in women with different combinations of mild pelvic floor dysfunction, as included stress or mixed urinary incontinence, anal incontinence and/or pelvic organ prolapse in grades I-II according to Pelvic Organ Prolapse Quantification Scheme. Combining both treatments does not seem to improve results. Effective perceived interventions and easy exercises suitable for the daily life integration, would enhance therapeutic adherence.

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