

DYNAMIC LUMBOPELVIC STABILIZATION EXERCISE PROTOCOL FOR THE TREATMENT OF STRESS URINARY INCONTINENCE IN WOMEN

Hypothesis / aims of study

To evaluate the effectiveness of the lumbopelvic stabilization exercise protocol in continence, sexual function and quality of life in women with stress urinary incontinence (SUI) and to identify the improvement perception after treatment.

Study design, materials and methods

Longitudinal clinical trial group for testing the experimental protocol of a randomized clinical trial. Were eligible literate women older than 18 years complaining of SUI and sexually. Ten women with a mean age of 49 ± 8.9 years (extremes 34 and 61 years) were selected by convenience. The lumbopelvic stabilization exercise protocol proposed (1.2) was based on the correct performance of movements. Initially the patients were assessed by the test of cough provocation to confirm the presence of SUI. The Incontinence Severity Index was elected to verify the severity of incontinence, o King's Health Questionnaire to verify the impact of incontinence on quality of life and Female Sexual Quotient to verify sexual satisfaction. All instruments were administered before and at the end 90 days after the end of the intervention. The exercises proposed for each stage of treatment were repeated until the correct biomechanical pattern was achieved. From the right move, the number of repetitions varied between 4 and 8 movements per exercise, depending on the physical condition and functional ability of each participant. The criterion for stopping the exercise was self-reported fatigue or observing inaccurate motion by the physiotherapist. The treatment protocol was divided in four stages according to the degree of complexity of the proposed exercises. In the first two sessions (stage I) were requested 10 isolated contractions of the pelvic floor muscles lasting 10 seconds each at fours position, sitting and standing for the purpose of adapting the participant to exercise and gain muscle endurance. In sessions three and four (stage II) was requested movement of upper and lower limbs associated with activation of the stabilizing muscles of the lower trunk with maximum repetitions without compensation. The fifth to the seventh session (stage III) the stabilization exercises were performed during controlled the lower back and pelvis on uneven surfaces with maximum repetitions without motion compensation. Finally, the eighth to the tenth session (stage IV) the exercise of stages II and III were performed at higher speed respecting the maximum number of repetitions without compensation. The sessions happened individually twice a week over five weeks, totaling 10 sessions lasting about 30 minutes each, always under the supervision of a physiotherapist. The perception of improvement was assessed by the Patient Global Impression of Improvement Questionnaire after treatment and 90 days later. Depending on the sample size, we chose to use descriptive statistics to analyze the data.

Results

Eight women completed the treatment. The severity of incontinence before the intervention was "severe" or "moderate" for the eight women, after the intervention, three remained "severe" or "moderate" and five "light". Ninety days after the end of treatment, four were classified as "moderate" and four as light. The negative impact of losses in quality of life according to the King's Health Questionnaire was reduced over time, especially comparing to the initial and final assessments. Sexual satisfaction did not change and the perceived improvement remained stable at the end and 90 days, so that five women reported feeling "much better" two "better" and "a little better".

Interpretation of results

The exercise protocol proposed lumbopelvic stabilization was effective outcomes for continence and quality of life of women with SUI during the study period, but not for sexual satisfaction outcome. The perceived improvement was positive at the end and 90 days after treatment.

Concluding message

The effectiveness of the proposed approach was positive for two of the three outcomes assessed and improved loss over time was maintained even in the perception of patients. Even though the results are encouraging, suggests study with a larger sample for confirmation or refutation of the results achieved and randomized study comparing the protocol used to trigger the exercises of the pelvic floor muscles, considered the gold standard for conservative physical therapy treatment for SUI.

References

1. Sahrman SA. Diagnóstico e Tratamento das Síndromes de Disfunção dos Movimentos. 1ª. edition. São Paulo: Santos; 2005.
2. Wohlfahrt D, Jull G, e Richardson C. The relationship between dynamic and static function of abdominal muscles. Aust J Physiother. 1993; 39(1): 9–13.

Disclosures

Funding: The study received no external funding or subsidies. **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** Ethics Committee of UNiversidade Federal de Juiz de Fora (CEP UFJF, number 190.572) **Helsinki:** Yes **Informed Consent:** Yes