

THE RESPONSE OF THE PELVIC FLOOR MUSCLE TO LOWER EXTREMITY MOVEMENT PATTERNS IN WOMEN WITH STRESS URINARY INCONTINENCE

Hypothesis / aims of study

Pelvic floor muscle (PFM) dysfunction has been associated with development of stress urinary incontinence (SUI). Little is known about the automatic activity of the PFM during different patterns of the lower limb movement. The purpose of this study was to investigate the involuntary contraction of the PFM during lower extremity proprioceptive neuromuscular facilitation (PNF) patterns and active straight leg raising (ASLR) in women with and without SUI.

Study design, materials and methods

Two-way mixed-design was used to assess the automatic response of PFM during PNF patterns and ASLR in 40 female (20 continent, 20 incontinent). Transabdominal ultrasound (TA-US) was used to assess the bladder base displacement as a gauge for PFM activity. Two-way mixed-ANOVA was used to analyse the data.

Results

The result of two-way mixed-design ANOVA approved that the effect of different lower limb movement patterns on involuntary PFM contraction was statistically significant ($p < 0.05$). However, the effect of health status and interaction of health status with movement patterns were not statistically significant. ASLR led to more involuntary PFM contraction than different PNF patterns in incontinent women. However, no significant difference was found between ASLR and different PNF patterns in continent women. No significant difference was found in involuntary PFM contraction during lower extremity movement patterns between continent women and those with SUI.

Interpretation of results

PFM is automatically contracted during different lower extremity movement patterns in women with and without SUI.

Concluding message

The findings of this study show more PFM involuntary contraction in ASLR than lower extremity PNF patterns in women with SUI.

Disclosures

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