

Ingrid, et al, 2018 Abstract

Effect Of PFM Contraction On Resting Muscle Activity

Objective

The purpose of the study was to assess whether attempts of a maximal voluntary pelvic floor muscle (PFM) contraction can reduce vaginal resting pressure (VRP), and **surface electromyography (sEMG)** activity in women with and without provoked vestibulodynia (PVD).

Results

There were no significant differences between the groups in any background variables. PFM contraction led to a statistically significant reduction of VRP in both the PVD and the control group. **Surface EMG** activity was significantly reduced in the PVD group only.

The women with PVD had significantly lower vaginal resting pressure and **sEMG** activity after three maximum contractions (MVCs) of the PFM. The results indicated that attempts of voluntary maximal contractions may be investigated as a method to reduce PFM hypertonicity.

Participants and Researchers

The research included a blinded comparison study including 35 women with and 35 women without PVD. The mean age of the participants was 24.3 years.

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Methods

VRP and PFM strength were measured with a high precision pressure transducer connected to a vaginal balloon. Pelvic floor muscle activity was measured before and after three MVCs with **surface EMG** using a **NeuroTrac ETS** unit (Verity Medical). Paired sample T-test was used to analyse difference within groups and independent sample T-test to analyse differences between groups.

The full abstract can be found at

<https://pubmed.ncbi.nlm.nih.gov/29532122/#:~:text=Discussion%3A%20Young%2C%20nulliparous%20women%20with,maximum%20contractions%20of%20the%20PFM>