

## Garstka-Namysl, Krystyna, et al, 2008 Abstract

### ES Of PFM And Oververtebral ES Therapy In Women After GYN Surgery

#### Objective

Symptoms of urinary incontinence (UI) and pelvic floor muscle (PFM) and nerve activity disorders in women after gynaecological (GYN) operations cause disorders of micturition (urination) and significantly affect the quality of sexual life. The aim of the study was to compare the changes in PFM activity resulting from electrotherapy - **electrostimulation (ES)** of pelvic floor muscles and oververtebral **electrostimulation** - using objective **surface electromyography (SEMG)** methods.

#### Results

The individually set **functional oververtebral stimulation (FES)** and **electrical muscle stimulation (EMS)** therapy resulted in a statistically significant improvement of the functional state of motor units confirmed by objective SEMG and MEP tests. Satisfaction with quality sexual life and life optimism increased statistically significantly in each case.

#### Participants and Researchers

The study included 27 women randomly selected from a group of 238 women after gynaecological operations (from two to 18 months after an operation) with symptoms of urinary incontinence. In the 27 patients the **electromyography (EMG)** and motor evoked potentials (MEP) tests indicated a neurogenic cause of complaints in the form of axonopathy of motor fibres rather than weakened impulsation at the level of neurons of the motor centre.

Krystyna Garstka-Namysl, PhD, Chair of Pedagogy of Leisure and Recreation, University School of Physical Education, Poznań, Poland; Juliusz Huber, Department of Pathophysiology of Motor Organs, University of Medical Sciences, Poznań; Magdalena Pisarska, Clinic of Operative Gynaecology, University of Medical Science, Poznań; Grzegorz H. Bręborowicz, Clinic of Perinatology and Gynaecology, University of Medical Science, Poznań; and Łucja Pilaczyńska-Szcześniak, Department of Hygiene, University School of Physical Education in Poznań.

#### Methods

The participants underwent gynaecological and global SEMG tests using a vaginal probe and an examination of motor evoked potentials (MEP). The parameters of **neuromuscular electrical stimulation (NMES)** and nervous functional oververtebral stimulation (FES) were selected individually for each patient. After thorough training on the use of equipment, the patients continued the therapy for eight weeks at home. It was recommended to carry out 10-15 minute **NMES** stimulation of pelvic floor muscles twice a day and oververtebral stimulation FES two to three times daily according to established parameters.

Assessment was by using a two-channel device for EMG and EMG biofeedback, the **NeuroTrac ETS** (Verity Medical) and a vaginal probe **Veriprobe** (Verity Medical). The patients were equipped with a specialist pelvic floor muscle and nerve

stimulator, **NeuroTrac Continence** (Verity Medical) and a **Veriprobe** and a set of self-adhesive electrodes (Verity Medical) for oververtebral stimulation FES.

The full abstract can be found at

<https://www.czytelniamedyczna.pl/1047,change-in-the-assessment-of-sexual-intercourse-of-women-after-gynaecological-ope.html>.