

## **IMPROVING COORDINATION AND ACTIVATION OF PELVIC FLOOR MUSCLES BY ORIENTAL DANCE**

### **Aims of Study**

To evaluate the impact of oriental dance on voluntary functional activation of pelvic floor muscles and response of five basic movements of oriental dance to spontaneous activation of dancer's pelvic floor.

### **Methods**

A total of 37 women, 19 dancers knowing the basic movements (dancers) and 18 women with no history of pelvic floor disorders and oriental dance (control group), mean age 43,3 years, range 25-66.

Electromyographic activity of pelvic floor muscles was recorded with Periform intra-vaginal probe electrode (Neen Health Care, Norfolk, UK), which remained securely in place. All the women underwent a baseline EMG recording without voluntary activation in sitting posture on the Swiss Ball and same five voluntary functional tests: sitting, standing up / sitting down, standing, walking and taking steps up and down stairs. The measure of strength, speed of contraction, stability of contraction and relaxation was made during a sequence of contract / relax repetition, 5 trials of 5 seconds contract and 10 seconds relax. The dancers underwent beside this an examination including five different basic movements. EMG-Biofeedback Neurotrac (Verity Medical LTD, Surrey UK) was used with a statistical record on the PC Database System, stored and plotted as one of the graphs of a report.

For statistical analysis Independent Samples Test and Mann-Whitney U Test were used.  $P < 0,05$  was defined as significant.

### **Results**

Statistically significant differences as microvolts were observed between dancers and control group both in average and peak values. Continuous basic activity at rest was same among the groups. The age had no significance to pelvic floor voluntary activation. A spontaneous increase in pelvic floor activity during oriental dance movements was found among all the dancers and delivery had no significance to that activity.

### **Conclusions**

This study found an association between good pelvic floor muscle activation and interest in oriental dance. While many studies have looked at the efficacy of treatment for improving pelvic floor dysfunction, no studies have explored the efficacy of conservative prevention strategies. Movements in oriental dance are concentrated noticeable much on the middle body, the abdomen and pelvis are dancing too. The pelvis is a natural movement centre in oriental dance, it is the physical central point and back support point of people. In view of the high prevalence of pelvic floor disorders among women of all ages, there is a real need for prevention strategies. Going in for oriental dance may be a physical exercise worthy of consideration to prevent pelvic floor disorders and keep this dynamic unit in function.