

## WHAT IS THE LEVEL OF PELVIC FLOOR MUSCLE FUNCTION IN FEMALES WITH PELVIC FLOOR DYSFUNCTION REFERRED TO PELVIC FLOOR MUSCLE TRAINING BY GYNAECOLOGISTS AND UROLOGISTS AT HOSPITALS? A RETROSPECTIVE STUDY, 1992-2008

### Hypothesis / aims of study

When gynaecologists and urologists at hospitals referred female patients with Pelvic Floor Dysfunction (PFD) to Pelvic Floor Muscle Training (PFMT) the level of Pelvic Floor Muscle (PFM) function is low in all females.

The aims of this study were 1) to investigate the level of PFM function in females with PFD referred to PFMT by gynaecologists and urologists at hospitals and 2) to identify associated factors for low level of PFM function.

### Study design, materials and methods

In hospital-based, retrospective clinical design female patients with PFD referred to a free PFMT program as outpatients were included. The measurement of PFM function at baseline was performed by digital vaginal palpation including: voluntary PFM contraction, PFM strength (0-5, Modified Oxford Scale, PFM static endurance (0-60 seconds) and dynamic endurance (0-30 contractions).

### Results

Data were analysed in 998 females, mean age 56 (SD 13) years, with PFD (urinary incontinence, n=757, anal incontinence, n=36, pelvic organ prolapse, n=111, other pelvic floor dysfunction, n=94). The results showed that 690 (70 %) females were unable to perform correct voluntary PFM contraction, mean PFM strength showed 1.5 (SD 1.0) on

Modified Oxford Scale, mean PFM static endurance showed 16.7 (SD 16.1) seconds and mean PFM dynamic endurance showed 18.9 (SD 12.8) contractions. Year of referral was the only significant different ( $p<0.01$ ) factor whereas age, nationality, diagnosis and urinary incontinence type did not show any different between females with low or high level of PFM function.

### Interpretation of results

The majority of females with PFD referred to PFMT by gynaecologists and urologists at hospitals needs to learn correct voluntary PFM contraction and almost all females (97 %) needs to improve the PFM strength regardless of age, nationality, diagnosis and type of urinary incontinence.

### Concluding message

The results showed that the majority of females with PFD referred to PFMT by gynaecologists and urologists at hospital were unable to perform correct voluntary PFM contraction and almost all females showed low PFM strength regardless of age, nationality, diagnosis and type of urinary incontinence.

It is suggested to investigate the level of PFM function for female patients with PFD referred to PFMT outside hospitals in primary health care as a much larger variety of symptoms may be expected thus needing a more flexible PFMT treatment program.

### Disclosures

**Funding:** Department of Physiotherapy and Occupational Therapy, Copenhagen University Hospital, Glostrup, Denmark

**Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** All baseline data for each patient was extracted from the referrals by the gynaecologists and urologists and the clinical notes recorded by the PT. The Ethical Committee of The Capital Region of Denmark, found that this study was not encompassed by the law of Ethics Committee (§ 6, stk 3). The study has been approved by the Register for Data Protection Agency and The Danish National Board of Health (j.no. 7-604-04-2/64/EHE, February 20, 2009). **Helsinki:** Yes **Informed Consent:** Yes