

## FACTORS PREDICTIVE OF RESPONSE TO BIOFEEDBACK ASSISTED PELVIC FLOOR MUSCLE TRAINING FOR URINARY INCONTINENCE

### Hypothesis / aims of study

To find out which patients' characteristics before biofeedback assisted pelvic floor muscle training (PFMT) for urinary incontinence are predictive of successful response

### Study design, materials and methods

We retrospectively analyzed the clinical and physiologic data of 86 patients who had been diagnosed as urinary incontinence after standardized urogynecologic history, physical examination including pelvic organ prolapse quantitation (POPQ), urinalysis, urodynamic study and treated with PFMT with biofeedback and electrical stimulation under the teaching of a well trained nurse. The clinical response was evaluated as success (no more requiring therapy) / failure (requiring surgery or the other medical therapy). Interrelations between patients' characteristics and response were assessed with multivariable logistic regression analysis

### Results

Fifty seven percent was demonstrated as a success group requiring no further therapy. In the univariable analysis, parity, alcohol drinker, stress urinary incontinence, detrusor overactivity, adherence and change of average tonic contraction after biofeedback assisted PFMT were selected with the *p* value less than 0.20. In the multivariable logistic regression analysis, independent predictive factor of successful response was a greater change in average tonic contraction of pelvic floor muscle measured by vagina electromyography after biofeedback assisted PFMT (OR : 1.661, 95% confidence interval : 1.015, 2.721)

### Interpretation of results

Most of the patient characteristics as factors predictive of response to biofeedback assisted pelvic floor muscle training were not significantly related to the outcomes.

### Concluding message

Biofeedback assisted PFMT requires no further therapy in the about sixty percent of the patients with urinary incontinence. Increased pelvic floor muscle function measured by vagina electromyography after biofeedback assisted PFMT significantly predicted successful response to therapy.

<b><i>Specify source of funding or grant</i></b>	<b>none</b>
<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>IRB EastWest NeoMedical Center KyungHee University</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>