

## APPLICATION OF KOREAN TRADITIONAL DANCE TO TREAT STRESS INCONTINENCE - POSSIBILITY FOR BEING A COMPLEMENT AND SUBSTITUTE FOR PELVIC MUSCLE EXERCISES

### Hypothesis / aims of study

The effectiveness of pelvic muscle exercises in treating stress incontinence is well known. However, pelvic muscle exercises are so difficult that many patients give up on carrying out them at the beginning, thus its effectiveness is lower than people thought. We believe that among basic movements of Korean traditional dance, slowly walking while bending and stretching the body or toe-walking are effective in overcoming the difficulties of the traditional pelvic muscle exercises.

### Study design, materials and methods

We conducted a survey for 49 stress incontinence patients who learn Korean traditional dance and asked them to do the traditional pelvic muscle exercises. Average age for those surveyed is 53.2 and average prevalence period is 47.3 months and they learned Korean traditional dance for 26.5 months in average. We classified ratings into 'very improved' for the cases in which after learning Korean traditional dance, they no longer suffered from incontinence or the symptoms decreased dramatically, 'improved' for incontinence was improved but not satisfactorily and 'not improved' for the cases in which the seriousness of incontinence remained unchanged.

### Results

When asked about the frequency of incontinence before learning Korean traditional dance, 8 (16.3%) patients said less than once a month, 17 (34.7%) said more than once a month, 21 (42.9%) more than once a week and 3(6.1%) said everyday. When asked about the improvement in incontinence after learning Korean traditional dance, 38 patients (77.6%) said 'very improved', 9 (18.4%) said 'improved' and 2 (4.1%) said 'not improved'. When asked about difficulties of Korean traditional dance, 8 patients (16.3%) said 'very difficult', 10 (20.4%) said 'little difficult', 18 (36.7%) said 'moderate' and 13 (26.5%) said 'not difficult'. All of those surveyed said they would continue to exercise Korean traditional dance. To compare with the traditional pelvic muscle exercises, we educated and trained them the pelvic muscle exercises which are currently administered to incontinence patients. And only 4 patients (8.2 %) said they would continue the pelvic muscle exercise despite of the difficulties.

### Interpretation of results

Among basic movements of Korean traditional dance, slowly walking while bending and stretching the body or toe-walking are effective in overcoming the difficulties of the traditional pelvic muscle exercises. So, this movement will improve incontinence and give a fun to patients.

### Concluding message

Further studies and scientific approaches are required, but some movements of Korean traditional dance turned out to be effective in treating stress incontinence. Moreover, given that the treating effects are incidental benefits of dancing rather than therapy, its fun factor will offset the shortcomings of the traditional pelvic muscle exercises.

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| <b><i>Specify source of funding or grant</i></b>               | <b>no funding</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>Dong-A university hospital</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>                        |