

ARE THERE ALTERNATIVES TO 1- HOUR PAD TEST FOR FEMALE PATIENTS WITH STRESS OR MIXED INCONTINENCE?

Hypothesis / aims of study

The amount of leakage in 1- hour pad test (PT) has been known to be one of the strong factors predicting the result of anti-incontinence surgery, but this test cannot be applied to some patients with physical restrictions. We purposed to investigate factors correlating with the amount of leakage in 1- hour PT through analyzing the parameters of preoperative evaluation before anti-incontinence surgery.

Study design, materials and methods

One hundred and ninety-two female patients, for whom 1- hour PT and urodynamic study (UDS) were conducted for stress or stress- predominant mixed incontinence and who did not have any other underlying diseases affecting voiding symptom such as UTI or neurological diseases, were enrolled. Among the patients, 135 had stress incontinence and 57 had stress- predominant mixed incontinence. When divided by Stamey grade, 127 were Grade 1, 55 Grade 2 and 10 Grade 3. We attempted to investigate the relation between the amount of leakage in 1- hour PT and each parameter, and identify independent factors correlating with the amount of leakage in 1- hour PT.

Results

In the correlation analysis between the amount of leakage in 1- hour PT and each parameter, the Pearson correlation coefficients of VLPP and CLPP were -0.30 ($p < 0.001$) and -0.28 ($p = 0.001$), respectively, showing significant negative correlation with the amount of leakage in 1- hour PT, but MUCP was not correlated. The higher Stamey grade was, the larger the amount of leakage in 1- hour PT was ($p = 0.001$, ANOVA). Based on VLPP 60cmH₂O indicating intrinsic sphincter deficiency, the average amount of leakage was 37.5gm in the group under 60cmH₂O, but 20.3gm in the group 60cmH₂O or over. According to Stamey grade as well, the amount was 19.6gm, 26.0gm and 47.3gm, respectively, for Grade 1, 2 and 3. When multivariate linear regression analysis was performed in order to evaluate the independent factors predicting the amount of leakage in 1- hour PT, CLPP was insignificant ($p = 0.348$). Also, VLPP was statistically insignificant, but when its level was lower, the amount of leakage in 1- hour PT tended to be larger ($p = 0.067$).

Interpretation of results

Factors related to the amount of leakage in 1- hour PT were VLPP and CLPP, and difference in the amount was also observed according to Stamey grade. In multivariate analysis, however, no factors predicted the amount of leakage independently.

Concluding message

One- hour PT is considered mutually supplementary to UDS in evaluating the severity of incontinence before anti-incontinence surgery.

<i>Specify source of funding or grant</i>	None
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	The IRB of Seoul National University Bundang Hospital
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No