Hypothesis / aims of study

The valsalva leak point pressure (VLPP) on urodynamic study (UDS) is measured to evaluate the severity and characteristic of incontinence. The aim of this study was to investigate the test-retest reliability of VLPP in female stress urinary incontinence (SUI).

Study design, materials and methods

Our study included 80 women who underwent UDS to evaluate SUI. The UDS was performed by a single operator consecutively within a 30 minutes period. Intra-class Correlation Coefficient (ICC) was used to investigate the test-retest reliability. All definitions of urinary incontinence corresponded to recommendations of the International Continence Society.

Results

The mean age was 58.9 ± 7.4 years. Among enrolled patients, 34 had only SUI; 46 patients had mixed urinary incontinence (MUI). The 32 patients had underline diseases such as diabetes mellitus (DM), cerebrovascular disease or spinal disease. Overall, test-retest reliability of VLPP on UDS is excellent (ICC 0.94, P < 0.01). When enrolled patients were divided into several groups by incontinence type and presence of underline diseases, test-retest reliability of VLPP is excellent in each group (ICC 0.96, P < 0.01 in a SUI group; ICC 0.93, P < 0.01 in a MUI group; ICC 0.95, P < 0.01 in a group without underline diseases; ICC 0.92, P < 0.01 in a group with underline diseases).

Interpretation of results

The test-retest reliability of urodynamic VLPP in female SUI is excellent regardless of comorbid factors such as MUI, DM, cerebrovascular disease or spinal disease.

Concluding message

The VLPP on UDS is a reliable data in female SUI.

Disclosures

Funding: no Clinical Trial: No Subjects: HUMAN Ethics not Req'd: this study is retrospective cohort study. Helsinki: Yes Informed Consent: No