

FLUID BRIDGE TEST COMBINED WITH LPP IN DIAGNOSING STRESS URINARY INCONTINENCE IN 50 WOMEN

Hypothesis / aims of study

The aim of this research is to study fluid bridge test combined with leak point pressure (LPP) diagnosing female stress urinary incontinence and evaluating urethral dysfunction.

Study design, materials and methods

Fifty women (age from 31 to 81y, with an average of 45 ± 9 y) with clinical symptoms of stress urinary incontinence (SUI) as SUI group (group I) and 35 normal women (age from 27 to 75 y, with an average of 43 ± 7 y) as control group (group II) were included in this study. Urodynamic examinations (fluid bridge test and LPP measurement) were performed in all patients according to the recommendations of the International Continence Society. The positive rate of fluid bridge test in the group I and group II was compared. We selected the cases from the group I who had the positive result in fluid bridge test as our research objects. The parameters of urodynamic, especially on the ΔP (bladder and urethral pressure difference) between bladder and urethra in the liquid bridge test were analyzed.

Results

There were 46 cases in the group I who had a leakage of urine (46/50) and 44 cases had the positive result in the fluid bridge test (44/50). In the group II, the fluid bridge test was positive in 2 cases (2/35) at the study. There was significantly difference in the positive rate of fluid bridge test between the group I and control group II ($P < 0.05$). Besides, we got the ΔP in the 44 cases from group I who had a positive result in fluid bridge test. In the 44 cases, we divided them into the four groups according to the SUI type by LPP. Among them, there were 11 cases (11/44) of type I whose ΔP was (11.0 ± 2.6) cmH₂O (group 1); 12 cases (12/44) of type II whose ΔP (19.6 ± 4.3) cmH₂O (group 2); 9 cases (9/44) of II / III whose ΔP (35.2 ± 9.1) cmH₂O (group 3); and 12 cases (12/44) of type III whose ΔP (49.7 ± 9.3) cmH₂O (group 4). There was no difference of ΔP between Group 1 and Group 2 ($P > 0.05$). However, there were significantly differences of ΔP between the two of others ($P < 0.01$), and it showed an increasing trend.

Concluding message

The fluid bridge test combined with LPP is more sensitive in diagnosing SUI and evaluating the urethral function. ΔP should be a good index for SUI typing.

Disclosures

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