

EFFECT OF PREGNANCY ON URETHRAL PRESSURE PROFILE IN LATE PREGNANCY STAGE

Hypothesis / aims of study

Stress urinary incontinence is a common disorder for women, and it has been well known that pregnancy may be main reason. However, it is not clear how pregnancy damages continence of urethra. This study is to investigate the effect of pregnancy on urethral pressure profile in late pregnancy stage women.

Study design, materials and methods

Static urethral pressure profile and micturitional fixed-position urethral pressure profile measurements according to the recommendations of the International Continence Society (ICS) were performed on 15 pregnant women who were all volunteers (pregnant group). The results were compared with 14 married but not procreate women who had upper urinary tract diseases but with normal lower urinary tract function (control group).

Results

The P ure.max, Pure.closure.max and urethral functional length of pregnant group were significantly higher than those of control group ($P < 0.05$); However, there were no significant differences in micturitional fixed-position urethral pressure profile between pregnant group and control group. Abrams-Griffiths number (A/G) and urethral resistance factor of pregnant women also showed that no one located in obstructed area.

Interpretation of results

In opposition to what is expected, urodynamic parameters reveal ability of continence increasing during pregnancy compared to women who married but not procreate. It may be related to many factors which included gradually increasing pressure in bladder and abdomen with foetus growth. However, it does not significantly affect the emptying of bladder.

Concluding message

The ability of continence increases in later trimester of pregnancy. However, sphincter can well relax during micturition, and it is not influenced that the efficiency of emptying bladder.

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| <i>Specify source of funding or grant</i> | National Natural Science Foundation of China(30571931) |
| <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> | Ethics Committee,First Affiliated Hospital of Zhengzhou University |
| <i>Was the Declaration of Helsinki followed?</i> | Yes |
| <i>Was informed consent obtained from the patients?</i> | Yes |