Introduction

Lower urinary tract symptoms (LUTS) have a high prevalence in the community and have a significant negative impact on quality of life. Urodynamic studies (UDS) are the most objective means of documenting the underlying pathology in patients with LUTS.

Objectives

Our aim of the study was to assess the impacts of age, parity, menopause and urine-holding on voiding function in urology patients.

Methods

The medical records of total 2,195 female non-neurogenic LUTS patients with urodynamic studies were reviewed at our center between January 2002 and March 2012. The urodynamic investigations included maximum flow rate (free Qmax), filling cystometrography (CMG), voiding pressure-flow study (PFS), external anal sphincter electromyography (EAS EMG) and urethral pressure profilometry (UPP) according to previously described techniques.

Results

The demographic characteristics and urodynamic parameters of the 2195 female with LUTS were listed in Tab 1. 30.5%(2195/7200) of the female patients in our center had LUTS. The mean age was 53.5 years, and the mean parity was 3.2. 41.6%(913/2195) of them was before menopause and the other 58.4%(1282/2195) was after menopause. 32.1%(705/2195) of them had urine-holding history and the other 67.9%(1490/2195) had not. We use four urodynamic variables as voiding parameters: maximum flow rate (Qmax) and post-void residual (PVR) from uroflowmetry, maximum urethral closure pressure (MUCP) and detrusor pressure at maximum flow (PdetQmax) from pressure-flow studies (PFS). Of the four factors (menopause, age, parity and urine-holding), only parity had a significant impact on uroflowmetry and pressure-flow study results (Qmax, p=0.001; PVR, p<0.001; MUCP, p=0.001; PdetQmax, p=0.005).

Conclusions

The incidence of female LUTS was 30.5% in our center. Our study indicated that parity had a significant impact on voiding function in urology patients. The bladder and urethral behavior in women after childbirth may be more complex than previously thought. More attention should be paid to women who suffer from lower urinary tract symptoms especially after childbirth.

References: