# URODYNAMIC AND CLINICAL FEATURES IN WOMEN WITH DYSFUNCTIONAL VOIDING (DV) WITHOUT ANATOMICAL ABNORMALITIES ON PHYSICAL EXAM OR IN NON-INVASIVE IMAGING EXAMS COMPARED WITH UNDERACTIVE BLADDER SYNDROME

Authors: Diamantis Georgios<sup>1</sup>, Mangita Adriana<sup>2</sup>, Konstantinidis Charalampos<sup>1</sup>

- 1. Urology and Neuro-urology Unit, National Rehabilitation Center, Athens, Greece
- 2. Teacher Nurse

#### Hypothesis / aims of study

Dysfunctional Voiding (DV) is characterized by an intermittent and/or fluctuating flow rate due to involuntary intermittent contractions of the periurethral striated or levator muscles during voiding in neurologically and anatomically intact women. These patients clinically present usually with voiding difficulty, frequency and incomplete emptying of their bladder, a clinical condition very similar to Underactive Bladder (UAB). This study investigates the clinical presentation and the urodynamic characteristics in women with DV.

## Results and interpretation

According to the UDS findings,Bladder Outlet Obstruction(BOO) was the diagnosis and was present in all women in combination with significant electromyographic activity during voiding .Detrusor pressure over 20cmH2O during voiding, low maximum flow rate and large post-void residual volume were the rest of the UDS observations. Regarding the clinical presentation, 24 patients reported voiding symptoms as their main issue, 14 patients reported storage symptoms. Difficulty in urination was the predominant complaint (main symptom) in 20 women, followed by frequency in 10 women and post-micturition LUTS in the rest 8 women.

### Study design, materials and methods

This was an prospective study including 300 non-neurological women with LUTS according to Questionaire module(ICIQ-FLUTS) pooled from the urodynamic office from 2010 to 2023 of our department. Among them, we have identified 38 women diagnosed with DV. Clinical urinary symptoms and the UDS characteristics of these patients were statistically analyzed using a combined cut-off value of Qmax<15ml/sec and PdetQmax>20cmH2O including EMG.The voiding pattern has been clasified according to Solomon-Greenwell nomogram.

### Conclusions

Voiding or storage symptoms and UDS findings of Bladder Outlet Obstruction (BOO) were present in most women with DV. UDS is necessary for accurate diagnosis in women with LUTS that can distinguish Underactive Bladder Syndrome from Dysfunctional Voiding.