

## THE ROLE OF URINALYSIS IN WOMEN WITH HABIT OF MICTURITION POSTPONEMENT AND NON-NEUROGENIC LUTS

### Hypothesis / aims of study

The role of urinalysis as a screening test in various type of non-neurogenic lower urinary tract dysfunction (LUTD) has not yet been established [1]. On the other hand, women may voluntarily avoid using toilets despite they need to urinate due to some reasons, including voiding habits, cultural and behavioral factors or occupational. Such a voluntarily postponement of micturition may cause lower urinary tract symptoms (LUTS). However, this subject has not yet been elucidated adequately [2,3]. We aimed to prospectively study on this lifestyle disorder in order to determine role of urinalysis as a screening test in women with habit of micturition postponement and non-neurogenic LUTS.

### Study design, materials and methods

This prospective study included 24 women (mean age: 50.3, range 30-69) with non-neurogenic LUTS (5 stress urinary incontinence [SUI], 14 mixed urinary incontinence [MUI], 5 overactive bladder [OAB]) and stated that they had a habit of urination postponement. Control group consisted of 21 age-matched women with non-neurogenic LUTS (12 MUI, 9 OAB) and no habit of urination postponement. The subjects with bladder outlet obstruction were excluded. Demographic and clinical characteristics were recorded. Microscopic urinalysis, 3-day voiding diary, uroflowmetry and postvoid residual urine (PVR) measurement were performed in both groups. Voiding diary included maximum voided volume (MaxVV) per day, micturition frequency (MF), mean voided volume (MVV) and total voided volume (TVV) per day. Statistical analysis was performed to compare the data obtained from both groups. The study is limited by the lack of homogeneous samples in terms of the LUTD type and the lack of a standardized tool to determine habit of micturition postponement.

### Results

Urinalysis revealed abnormal number (>4) of epithelial cells in 16 women (66.7%) from study group and in 2 (9.5%) from control group ( $p < 0.001$ ). Other parameters were not statistically different. PVR measurement was >100 ml in 8 (33.3%) patients from study group.

### Interpretation of results

The finding of the increased number of epithelial cells in urinalysis may indicate that such women may have an abnormal micturition habit.

### Concluding message

This prospective study demonstrated that urinalysis is an useful screening test in women with habit of micturition postponement and non-neurogenic LUTS, by showing the importance of the finding of an increased epithelial cells in urinalysis. Therefore, this finding may be used to adequately diagnose and treat such women.

### References

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3. Nygaard I, Linder M. Thirst at work--an occupational hazard? Int Urogynecol J Pelvic Floor Dysfunct. 1997;8:340-343.

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<b>Is this a clinical trial?</b>	<b>Yes</b>
<b>Is this study registered in a public clinical trials registry?</b>	<b>No</b>
<b>Is this a Randomised Controlled Trial (RCT)?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>No</b>
<b>This study did not require ethics committee approval because</b>	<b>This is a routine part of clinical diagnostic process</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>

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*Was informed consent obtained from the patients?*

Yes

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