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THE RELATIONSHIP BETWEEN AUTONOMIC DYSFUNCTION AND QUIALITY OF LIFE IN WOMEN WITH OAB

Hypothesis / aims of study
The purpose of this study is to identify the relationship between autonomic dysfunction and quality of life in women with overactive bladder (OAB) according to detrusor overactivity (DO).

Study design, materials and methods
32 OAB female patients without DO and 20 OAB female patients with DO proven by urodynamic study were included retrospectively. All subjects had no disease and did not take any medicine that can affect autonomic activity. We measured and compared their heart rate variability (HRV) and quality of life by King's health questionnaire (KHQ). This study was performed without any financial funding.

Results
Low frequency (LF) values in HRV were lower in OAB patients with DO than in those without DO (128.6±23.6 vs 299.1±79.1, p=0.046). In addition, the scores of role limitation (172.4±12.4 vs 126.7±49.5, p=0.04) and sleep/energy domain (165.8±14.1 vs 112.9±8.6, 0.001) were higher in OAB patients with DO than in those without DO. In correlation study, DO was significantly correlated with role limitations and sleep/energy domain of KHQ, Low frequency/High frequency (LF/HF) ratio was significantly correlated with general health perception and personal relationship.

Interpretation of results
There is difference of LF value which is an indicator of parasympathetic activity in HRV between OAB patients with DO and those without DO. Also DO is correlated with quality of life, especially role limitations and sleep/energy domain. LF/HF ratio represents the ANS balance, and low LF/HF ratio correlated with general health perception and personal relationship.

Concluding message
This is a pilot study to evaluate autonomic dysfunction in OAB patients according to the presence of DO. There is difference of autonomic dysfunction between OAB patients with DO and those without DO. Also DO is correlated with quality of life, especially role limitations and sleep/energy.

References
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