THE EFFECT OF DIABETES DURATION ON VOIDING FUNCTION IN PEOPLE MORE THAN 45 YEAR OLD

Hypothesis / aims of study
To investigate the effect of diabetes (DM) (type II) duration on bladder storage function in middle-aged and elderly patients

Study design, materials and methods
From June 2010 to February 2011, 9,227 local residents aged more than 45 years old were investigated by filling in Overactive Bladder Symptom Score (OABSS) and Patient Perception of Bladder Condition (PPBC) on the spot. They were located in five randomly selected administrative regions of Zhengzhou City, Henan Province (residence time was more than five years). All investigated residents were divided into diabetes group (DG) and non-diabetes group (NDG). According to DM duration the first group was divided into 3 sub-groups: less than 5 years (group I), 5 to 10 years (group II) and more than 10 years of diabetes (group III). The difference OABSS and PPBC were compared between the different groups. The \( p < 0.05 \) indicates a significant difference.

Results
A total of 8,813 (95.5%) (57.9±9.7 Y) were qualified to enter the final statistical analysis. 6,505 subjects were included in the NDG and 2,308 in the DG. Subjects in the DG had an OABSS significantly higher than those in the NDG (Table 1). OABSS increased gradually with the increase of the disease duration. The OABSS in the sub-groups I, II, III was 1.62 ± 1.43, 1.73 ± 1.59 and 2.10 ± 1.76, respectively. Moreover, OABSS score in the sub-group III was significantly higher than that in sub-groups I and II (\( P < 0.05 \)) (Table 2).

Interpretation of results
With the development of diabetes mellitus, OABSS increases gradually. The score in the group III was the highest of all groups. This support the hypothesis that with the increase of DM duration the progression of nerve and bladder injury becomes significant, and consequently, the bladder dysfunction occurred. This is supported by our finding that patients with more than 5 years of DM history have higher OABSS and PPBC than the group with less than 5 years DM history.

Concluding message
To my knowledge, this is first study that related to DM (type II) duration and severity of voiding dysfunction in China. The longer the DM duration is, more severe is the voiding dysfunction. Therefore, it should be paid more attention for DM patients who had more than 5 years duration of disease. OABSS and PPBC are good screening tools for evaluation of voiding dysfunction in this population.
Disclosures

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