

CLINICAL PRESENTATIONS OF LOWER URINARY TRACT DYSFUNCTION IN PATIENTS WITH DIABETES MELLITUS

Hypothesis / aims of study

Micturition disorders occur in 25-30% of patients with diabetes mellitus type 2 and known as diabetic cystopathy. The aim of our study was to determine the clinical features of diabetic cystopathy, depends on diabetes mellitus type 2 duration and compensation degree.

Study design, materials and methods

36 (9 men and 27 women, age 30-83 years) patients with diabetes mellitus type 2 and complaints of micturition disorders was examined in clinic. The diabetes mellitus type 2 duration was between 6 month and 15 years, and the average time between symptoms of urinary disorders and diabetes mellitus type 2 diagnosis was $14,1 \pm 4,2$ month.

Results

The first manifestations of diabetic cystopathy in all 36 patients were symptoms of overactive bladder. The mean time, when symptoms of overactive bladder appeared, was 1,5 years after diabetes mellitus type 2 diagnosis. At the time of study in 30 patients (83,3%) diabetic cystopathy manifested as overactive bladder symptoms and 6 (16,6%) had urine outlet disorders because of detrusor hypoactivity. The mean time before detrusor hypoactivity development was $9,4 \pm 1,4$ years after first symptom of diabetic cystopathy. Correlation between the type of micturition disorder and diabetes mellitus type 2 duration was significant ($p < 0,05$). Also there was a significant correlation between the type of lower urinary tract disorder and diabetes mellitus type 2 compensation grade, presence of other complications of diabetes mellitus type 2 such as diabetic neuropathy and diabetic angiopathy. On the other hand there was no correlation between the type of micturition disorder and patient's age and sex ($p > 0,1$).

Interpretation of results

The results show the combination of type of micturition disorders in patients with diabetes mellitus type 2. The clinical symptoms of diabetic cystopathy depend on diabetes mellitus type 2 duration. Bladder overactivity is the common type of diabetic cystopathy manifestation in the early period. In the late period diabetic cystopathy looks like detrusor hypoactivity. Probably, the development of bladder hypoactivity associated with reduction of detrusor contraction rate as a result of trophic disorders in bladder wall because of diabetic angiopathy.

Concluding message

The results of our study show the correlation between clinical symptoms of diabetic cystopathy and diabetes mellitus type 2 duration.

Disclosures

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