

IMPACTS OF DIABETIC CONDITIONS ON LOWER URINARY TRACT SYMPTOMS (LUTS) IN PATIENT WITH DIABETES

Hypothesis / aims of study

Diabetes increasing in the prevalence causes commonly lower urinary tract symptoms via peripheral neuropathic complication. The aim of this study is to evaluate that poor diabetic parameters relate to increase in voiding dysfunction to decrease quality of life.

Study design, materials and methods

One hundred sixty patients with diabetes visiting Diabetic Clinics were reviewed the clinical information, fasting blood sugar and HbA1c, and were measured for voiding function by symptom questionnaire, International Prostatic Symptom Score (IPSS), uroflowmetry and post-void residual urine. The relationship between diabetic parameters and LUTS parameters was analyzed.

Results

The patients with more than 5year-duration of diabetes predominantly noted higher in total score of IPSS ($p < 0.008$) and voiding symptoms ($p < 0.0002$), but not storage symptoms. Duration of diabetes significantly correlate with IPSS ($r = 0.23$). However, the duration of diabetes did not correlate with uroflowmetric parameters including post-void residual urine. In patients with moderate to severe voiding symptoms (IPSS > 17), percentage of the patients with serum HbA1c > 7mg% was higher than one with mild voiding symptoms. Storage symptoms also was severe in the patients with serum HbA1c > 7mg%. Serum fasting blood sugar level did not associated with IPSS or uroflowmetric parameters.

Interpretation of results

The patients with longer duration of diabetes or poor control of diabetes (higher HbA1c) expressed predominantly the signs of voiding symptoms rather than storage symptoms, suspecting neuropathic bladder.

Concluding message

For the ideal treatment of the LUTS patients with diabetes, it should not only be treated for voiding symptoms but be provided with proper diabetic control.

<i>Specify source of funding or grant</i>	No fund or grant
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	This is a retrospective study to review the chart.
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes