

EXPERIENCE OF APPLICATION OF INTRAVESICAL INJECTIONS OF BOTULOTOXIN A IN TREATMENT PATIENTS URINAL TRACT TUBERCULOSIS WITH LOWER URINARY TRACT SYMPTOMS

Hypothesis / aims of study

To study efficacy of intravesical injections of botulotoxin A in treatment patients of urinary tract tuberculosis with lower urinary tract symptoms.

Study design, materials and methods

The criteria of the inclusion of the patients was the inefficiency of the standard therapy the antituberculotic drugs in flow of 4 months and have been treated with anti-cholinergic drugs if symptomatic. At patients the expressed symptoms of the inferior urine paths were conserved. This patients continued to complain of the lower urinary tract symptoms.

5 patients with urinary tract tuberculosis and with lower urinary tract symptoms have been made intravesical injections of 200 IU of Botulotoxin A. All the patients were the females in active stage of urinary tuberculosis with the age from 28 to 52 years.

The study included the complex tests such as clinical, laboratorial, x-ray, ultrasound, endoscopic methods. We studied the complaints of the patients completing the chart due to the International System for the Evaluation of the lower urinary tract symptoms (I-PSS и QUL). The score for the light disorders was less than 7, for the medium disorders – 8-19, for the sever disorders as 20-35. The daily rhythm of the spontaneous emictions was registrated in the dairy of the patient, with the number and the volume of the urine.

The criteria of the efficacy of the applied method was the lowering of the frequency of the mictions, the augmenting of the functional capacity of the bladder, the improvement of the I-PSS и QUL indices 30 days later.

Results

All the patients during the therapy with the antituberculotic therapy had white blood cells and red blood cells in the urine. The frequency of the daily miction was $32,8 \pm 2,7$ per day. The functional capacity of the bladder was $56 \pm 9,3$ ml. The QUL index was $5,4 \pm 0,13$. The I-PSS score was $30 \pm 1,6$.

All the patients after 1 week intravesical injections 200 IU of Botulotoxin A revealed the lower urinary tract symptoms. 30 days later the frequency of the daily emictions reduced to $10 \pm 0,3$ a day, the functional capacity of the bladder augmented up to $196 \pm 28,8$ ml. The positive results were obtained also in the quality of life score. I-PSS index was $10,6 \pm 0,9$ and QUL was $2,2 \pm 0,11$. The residual urine was not revealed in the observed patients.

We did not observe the side effects after the intravesical injections of Botulotoxin A. At all patients in the first days the small hematuria which self-contained passed was observed.

12 months later in 2 patients we studied the frequency of the daily emictions and the functional capacity of the bladder. The capacity of the bladder was more than 200 ml, and the frequency of the emictions day did not exceed 8-10 times.

Interpretation of results

The received results have shown that intravesical injections 200 IU of Botulotoxin A quench nerve terminations in a bladder. It leads to augmentation of container of a bladder and depression of frequency of emictions.

Concluding message

Our discreet experience of the application of the intravesical injections of Botulotoxin A in treatment of lower urinary tract symptoms the patients with the urinary tract tuberculosis permit to estimate positively this method. The preliminary data shows the relevant clinical effect of the intravesical injections of Botulotoxin A and the better quality of life in the patients with the urinary tract tuberculosis, in the cases of inefficiency of the initial therapy with the anti-cholinergic drugs combined with the traditional therapy with antituberculotic drugs. Nevertheless, applied method requests the further research and studying in more patients.

Disclosures

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