26

Extracorporeal magnetic therapy for the treatment of chronic prostatitis Eur Urol Suppl 2017; 16(5);e2192

<u>Gavrusev A.</u><sup>1</sup>, Strotsky A.<sup>1</sup>, Malashchitsky D.<sup>2</sup>

<sup>1</sup>Belarussian State Medical University, Dept. of Urology, Minsk, Belarus, <sup>2</sup>4-Th City Clinical Hospital, Dept. of Urology, Minsk, Belarus

**INTRODUCTION & OBJECTIVES:** The use of antibiotics, NSAIDs and other medications for the treatment of chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) is insufficiently effective and has side effects. Physical therapy can be successfully used for the treatment of prostatitis. Different types of magnetic radiation have an anti-inflammatory, analgesic, neuromodulating effects. Objective: to evaluate the effectiveness of extracorporeal magnetic therapy (ExMT) in the treatment of CP/CPPS.

**MATERIAL & METHODS:** Between 2015 and 2016, 74 men with the CP/CPPS (NIDDK category IIIA, B) were enrolled in the study. The mean age was 32 years (range 21-59). Patients were evaluated by history, physical examination, examination and culture of expressed prostatic secretions, urethral swab. The NIH-CPSI score was used to grade symptoms of disease. Inclusion criteria were a total score of at least 15. Patients were prospectively randomized in a 2:1 ratio into the active (53 patients) and control groups (21 patients). All of them received empirical antibiotic therapy for 2-4 weeks. Patients allocated to active group completed ExMT by NeoControl system (Kitalpha Med Ltd., Germany). Treatment sessions were 3 times a week for 4-6 weeks. The frequency of the pulse field was 10-50 Hz for 20 min. In the control group, antibiotic therapy was supplemented with diclofenac and tamsulosin. Patients were evaluated at the start, 3 and 9 months after treatment. Treatment effect was assessed by decrease in NIH-CPSI pain, urinary, quality of life subscores and total score.

**RESULTS:** The mean NIH-CPSI total score ( $\pm$ SD) at baseline in active group was 21.4 $\pm$ 8.1, in control - 20.9  $\pm$ 8.5. After treatment a significant decrease pain and urinary symptoms was observed in both groups. There was no statistically significant difference between symptom scores in both groups immediately and 3 months after treatment. However, after 9 months a significant difference was observed when symptom scores in the active and control groups were analyzed. The mean NIH-CPSI total score was improved from 21.4 $\pm$ 8.1 to 12.2 $\pm$ 6.9 in the magnetic therapy group and 20.9 $\pm$ 8.5 to 16.8 $\pm$ 7.1 for control (P<0.005).

**CONCLUSIONS:** The results suggest that addition of ExMT therapy to antibiotics may produce have better long-term effect on symptoms of the disease than application of diclofenac and tamsulosin in patients with CP/CPPS.