

## THERAPEUTIC EFFICACY OF BIPOLAR RADIO FREQUENCY THERMAL TREATMENT FOR PATIENTS WITH CHRONIC PROSTATITIS

### Hypothesis / aims of study

In regarding of cost, ease of use and efficacy, bipolar radio frequency thermal therapy (*Tempo* system from *Direx-Initia*) for patients with chronic prostatitis (CP) intractable to conventional medication shows effective improvement in pain, voiding symptom and quality of life. We compared the clinical symptom and treatment result in order to evaluate the therapeutic efficacy.

### Study design, materials and methods

A retrospective study of 26 patients diagnosed as CP (National Institutes of Health; NIH-category III) who were under 50 years old between october 2009 and september 2010 was performed. 20 patients were diagnosed as inflammatory CP (NIH-category IIIa) and the rest were noninflammatory CP (NIH-category IIIb). We used the *Tempo* system with a treatment protocol of 55 degree Celsius for 50 minutes, medium heating rate. All patients performed the NIH-chronic prostatitis symptom index (CPSI) before and after treatment.

### Results

In the patients with CP, the mean serum prostate specific antigen level was  $0.9 \pm 0.3$  ng/ml and the prostate volume was  $27.1 \pm 5.5$  gm. The average score for all 3 domains in NIH-CPSI significantly decreased.

### Interpretation of results

The total scores decreased from  $19.8 \pm 7.1$  to  $11.1 \pm 7.0$ , the pain domain decreased from  $8.6 \pm 3.1$  to  $4.8 \pm 3.1$ , the voiding symptoms from  $5.1 \pm 1.8$  to  $3.6 \pm 1.8$ , and the effect on the quality of life from  $6.1 \pm 2.2$  to  $3.4 \pm 2.2$  ( $p < .001$ ).

### Concluding message

*Tempo* system for patients with chronic prostatitis intractable to conventional medication can provide significant improvement in NIH-CPSI. Large, randomized controlled trials are needed to confirm the efficacy of these data.

<b><i>Specify source of funding or grant</i></b>	<b>nothing</b>
<b><i>Is this a clinical trial?</i></b>	<b>Yes</b>
<b><i>Is this study registered in a public clinical trials registry?</i></b>	<b>No</b>
<b><i>Is this a Randomised Controlled Trial (RCT)?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>No</b>
<b><i>This study did not require ethics committee approval because</i></b>	<b>This study is retrospective review of clinical outcomes</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>