

## THERAPEUTIC EFFICACY OF BIPOLAR RADIO FREQUENCY THERMAL TREATMENT FOR PATIENTS WITH BENIGN PROSTATE HYPERPLASIA

### 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 benign prostate hyperplasia (BPH), especially dissatisfied with conventional medication and unwilling to surgery, shows effective improvement in the voiding symptom and the quality of life. We compared the clinical symptom and treatment result in order to evaluate the therapeutic efficacy.

### Study design, materials and methods

A prospective study of 63 patients diagnosed as BPH who presented with a serum prostate specific antigen (s-PSA) level lower than 4ng/ml between october 2009 and september 2010 was performed. We used the *Tempo* system with a treatment protocol of 55 degree Celsius for 50 minutes, medium heating rate. Patients with BPH performed the uroflowmetry and the international prostate symptom score (IPSS) before and after treatment.

### Results

In the patients with BPH, the average s-PSA level was  $1.1 \pm 0.8$  ng/ml and the prostate volume was  $35.5 \pm 8.7$  gm, and the mean maximal flow rate (Qmax) was  $11.9 \pm 4.3$  ml/s before treatment and it was  $13.9 \pm 5.9$  ml/s after treatment ( $p < .05$ ). Also, the IPSS was significantly decreased from  $19.6 \pm 5.7$  to  $13.6 \pm 6.1$ , and the effect on the quality of life from  $3.3 \pm 0.9$  to  $2.3 \pm 0.9$  ( $p < .001$ ).

### Interpretation of results

for patients with BPH can provide significant improvement in uroflowmetry, IPSS and the effect on the quality of life.

### Concluding message

*Tempo* system will be alternative treatment option for patients with BPH dissatisfied with conventional medication and unwilling to surgery but 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>