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 (Tempro 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 Tempro 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±0.8ng/ml and the prostate volume was 35.5±8.7gm, and the mean maximal flow rate (Qmax) was 11.9±4.3ml/s before treatment and it was 13.9±5.9ml/s after treatment (p<.05). Also, the IPSS was significantly decreased from 19.6±5.7 to 13.6±6.1, and the effect on the quality of life from 3.3±0.9 to 2.3±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
Tempro 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.

Specify source of funding or grant
Nothing

Is this a clinical trial? Yes

Is this study registered in a public clinical trials registry? No

Is this a Randomised Controlled Trial (RCT)? No

What were the subjects in the study? HUMAN

Was this study approved by an ethics committee? No

This study did not require ethics committee approval because This study is retrospective review of clinical outcomes

Was the Declaration of Helsinki followed? Yes

Was informed consent obtained from the patients? Yes