

Tempro – A New Transurethral Bipolar Radiofrequency Device for BPH Thermal Treatment, One Year Follow-up

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Introduction

Several minimally invasive systems are being offered to the urologist to treat BPH. They include Thermal therapy using Microwave, Monopolar Radio Frequency (T.U.N.A.) and recently a Bipolar Radio Frequency (T.U.R.F) system called TEMPRO.

The purpose of the study was to assess the safety and efficacy of the new Tempro device. In the past I presented my initial experience, with a 3 month follow-up elsewhere (WCE).

Methods

The Tempro uses a special 16Fr Foley applicator catheter with 6 ring electrodes. The system computer controls the bipolar RF energy delivery to the prostate using feedback from 3 temperature sensors. Treatment protocols were 55° C, 1 hour and recently 60° C/15 minutes without cooling.

Due to the use of Bipolar RF, the heat is concentrated in a small cylinder around the urethra, thereby not requiring a rectal probe.

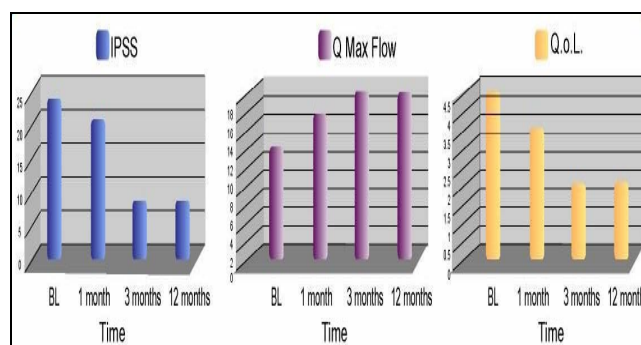
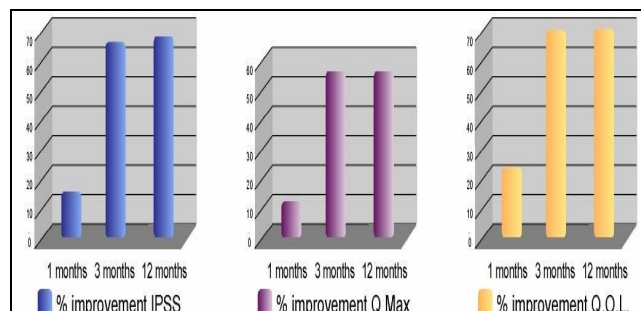
Results

During the last 18 months, a total of 105 patients were treated with this new system. The inclusion criteria were as follows: patients with a high level of BPH symptoms, (IPSS score >20), moderate Qmax flow (range 6 to 14 ml/sec) and bad quality of life.

Out of the 105 patients, I am reporting the results of the first 30 patients, which have completed at least one-year follow-up.

The 3 previous parameters were tested at Baseline (BL), 1 month (1 M), 3 months (3M) and 1 year (1YR) or more with the following average and standard deviation results (in brackets).

IPSS	BL=23.2 (3.7)	1M=20.2(7.3)	3M=8.5(4.7)	1YR =8.2 (3.0)
QMax	BL=11.4 (2.8)	1M=12.5 (2.6)	3M=17.4 (3.3)	1YR =17.5 (2.5)
QoL	BL= 4.3 (0.8)	1M= 3.4(1.1)	3M= 1.5 (0.7)	1YR = 1.5(0.5)



The average of absolute % of improvement compared to baseline is as follows:

IPSS	1M=12.9%	3M=63.6%	1YR =64.7%
QMax	1M= 9.5%	3M=53.1%	1YR =53.2%
QoL	1M= 20.9%	3M=66.2%	1YR = 65.3%

The treatment was well tolerated by all patients, and no treatment had to be discontinued due to pain. Analgesia used was a small dose of Tramadol drops.

The only side effect was a small percentage of Post Treatment catheterization for 2-4 days.

Conclusion

In my experience, the Tempro treatment seems to be safe and effective, and provides an important tool to treat BPH symptomatic patients. Optimal results were reached at 3 months and maintained after one year. These results are encouraging. Additional studies are required to establish the long-term effectiveness of this treatment.