



**Fayoum University**

**Faculty of medicine**

**2015**

***Comparative study between monopolar and bipolar [TURIS] transurethral resection of prostate in treatment of benign prostatic hyperplasia***

**By**

**Assem Abdelaziz Mahmoud**

A thesis submitted for partial fulfillment of  
the requirements of the M.D degree of  
urology

**Faculty of medicine**

**Fayoum University**

**2015**

# **COMPARATIVE STUDY BETWEEN MONOPOLAR AND BIPOLAR [TURIS] TRANSURETHRAL RESECTION OF THE PROSTATE IN TREATMENT OF BENIGN PROSTATIC HYPERPLASIA**

**Assem Abdelaziz Mahmoud <sup>1</sup>, Hussien Abdel hameed Al Daqadossi <sup>1</sup>, Mohammed Kamal Saif Elnasr <sup>1</sup>, Mohammed Mabrouk Badr<sup>2</sup>**

- 1- Department of urology, Fayoum University, Fayoum, Egypt
- 2- Department of urology, Alazhar University, Cairo, Egypt

## **Abstract**

**Objective:** To compare standard monopolar transurethral resection of the prostate (TURP) and bipolar transurethral resection of the prostate in saline (TURIS) for management of benign prostatic hyperplasia (BPH).

**Materials and methods:** From January 2012 and February 2013, a total of 60 patients with symptomatic benign prostatic hyperplasia who are indicated for surgery were randomized into two groups. The first group was managed by monopolar TURP, and the second group was managed by bipolar TURIS. Different clinical parameters, perioperative complications and success rates were compared between both groups. The follow up was done at 1 month, 3months, 6 months and one year after surgical intervention where all patients were subjected to IPSS, uroflowmetry and postvoiding residual urine measurement.

**Results:** Patient demographic profiles were similar in both groups. Mean resection time and mean weight of resected prostate tissue were comparable for both groups. There was a statistically significant difference in sodium concentration change in the monopolar group (-5.3% change) versus no significant difference in the bipolar group (0.07% change). Two cases of clinically significant TUR syndrome occurred in the monopolar group while none occurred in the bipolar group. There was no significant difference in incidence of intra operative bleeding or blood transfusion between both groups. There was statistically significant improvement in the mean IPSS score, Qmax and PVRU in both groups during the follow up period.

**Conclusion:** Our study indicates that bipolar TURP is equally as effective as monopolar TURP in the treatment of BPH, but has a more favorable safety profile. The clinical efficacy of bipolar TURP is long-lasting and comparable with M-TURP at 1 year follow up.