بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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شبكة المعلومات الجامعية

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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MONA MAGHRABY

Holmium Laser Enucleation of the Prostate Versus Bipolar Transurethral Enucleation of the Prostate in Management of Benign Prostatic Hyperplasia

Thesis

Submitted for Partial Fulfillment of Doctorate Degree in Urology

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List of Abbreviations

Abb.	Full term
BOO	Bladder outlet obstruction
BPEP	Bipolar enucleation of the prostate
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BPH	Benign prostatic hyperplasia
CZ	Central zone
ES	External sphincter
EEP	Endoscopic enucleation of the prostate
HoLAP	Holmium laser ablation of the prostate
HoLEP	Holmium laser enucleation of the prostate
HP-HoLEP	High power HoLEP
LP-HoLEP	Low power HoLEP
LUTS	Lower urinary tract symptoms
ME	Moses Effect
m-HoLEP	MOSES technology in HoLEP
MoLEP	MOSES technology in HoLEP
MT	Moses Technology
PZ	Peripheral zone
QoL	Quality of life
SUI	Stress urinary incontinence
SPSS	Statistical package for social science
TUR	Transurethral resection
TURP	Transurethral resection of the prostate
TZ	Transition zone
UTIs	Urinary tract infections

INTRODUCTION

Benign prostatic hyperplasia (BPH) is the most common cause of lower urinary tract symptoms (LUTS) in elderly men that significantly affects the quality of life (QoL). Transurethral resection of the prostate (TURP) represents the standard surgical technique for the management of (BPH) with a prostate size less than 80 ml. However, considerable morbidities are associated with larger sizes. [1]

Endoscopic enucleation of the prostate (EEP) has been recognized as a treatment option for large prostatic adenomas, since first described by Hiraoka et.al, in 1986 [2], it started to gain popularity despite the long learning curve. Many studies have evaluated its safety and efficacy against open prostatectomy in large prostate size. [1]

EEP represents an anatomical surgical technique resembling a surgeon's finger in open prostatectomy where any energy source that provides adequate haemostasis could be used [3]. Many studies concluded that EEP relies on the surgeon's skills rather than the energy source itself [4,5]. Holmium laser enucleation of the prostate (HoLEP) was first described by Gilling in 1998 [6] and was proven to be effective with no prostate size limitation with adequate haemostasis [7], recently it has been approved as a standard treatment for large prostatic adenoma [1], bipolar enucleation of the prostate

(BPEP) has been introduced as an alternative energy source with a promising outcome with equal safety and efficacy [3,8,9].

Few studies compared both techniques, one study was done by Shoma et al. showing no statistical difference regarding safety and efficacy between both techniques[10], while Enikeev et al. reported earlier recovery and catheter removal with HoLEP compared to BPEP [8]. To our best knowledge, cost-effectiveness had not been estimated before between both techniques.

With such scarce information, we aimed through our study to compare these two energy sources in the enucleation procedure of the prostate in terms of safety, efficacy, and cost-effectiveness in the management of large prostatic adenoma.

AIM OF THE STUDY

To compare bipolar and Holmium energy sources in the enucleation technique of the prostate in terms of safety, efficacy, and cost-effectiveness in the management of large prostatic adenoma.