



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكروفيلم

# بسم الله الرحمن الرحيم



**MONA MAGHRABY**



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# شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

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علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



### يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



**MONA MAGHRABY**



# **Holmium Laser Enucleation Prostatectomy Versus Open Transvesical Prostatectomy in Prostate more than 80 Grams in Egyptian Men**

*Thesis*

*Submitted For Partial Fulfilment of Doctorate  
Degree in Urology*

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سببنا أنك لا تعلم لنا  
إلا ما علمتنا أنك أنت  
العليم العظيم

صدق الله العظيم

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# *List of Abbreviations*

Abb.	Full term
AUA.....	American Urological Association
AUA-SS.....	American Urological Association Symptom Score
BNC.....	Bladder neck contracture
BPE.....	Benign prostatic enlargement
BPH.....	Benign prostatic hyperplasia
BPO.....	Benign prostatic obstruction
CELAP.....	Combination Endoscopic Laser Ablation of the Prostate
DHT.....	Dihydrotestosterone
FDA.....	Food and Drug Administration
Ho:YAG.....	Holmium:yttrium aluminium garnet
HoLEP.....	Holmium laser enucleation of the prostate
HoLRP.....	Holmium Laser Resection of the Prostate
IPP.....	Intravesical prostatic protrusion
IPSS.....	International Prostate Symptoms Score
KTP.....	Potassium-titanyl-phosphate
LUTS.....	Lower urinary tract symptoms
OP.....	Open Prostatectomy
OSP.....	Open simple prostatectomy
PET.....	Polyethylene terephthalate
PSA.....	Prostate-specific antigen
PUL.....	Prostatic urethral lift
PVUR.....	Post void residual urine
Qmax.....	Maximum urinary flow rate
QoL.....	Quality of life
SUI.....	Stress urinary incontinence
TAUS.....	Transabdominal ultrasound
Tm:YAG.....	Thulium:yttrium aluminium garnet
TRUS.....	Transrectal ultrasound

## *List of Abbreviations Cont...*

Abb.	Full term
TURP .....	Transurethral resection of the prostate
UTI.....	Urinary tract infection

# INTRODUCTION

Benign Prostatic Hyperplasia (BPH) is considered one of the most common medical conditions in elderly men affecting their quality of life. BPH is also responsible for a high magnitude of lower urinary tract symptoms of those men. The prevalence of BPH increases from the age of 40 to the age of 90 at which the prevalence becomes 100% <sup>(1)</sup>.

After the failure of medical options for those men or developing complications of bladder outlet obstruction due to BPH, the surgical options arise such as transurethral resection of the prostate (TURP) in small gland and open prostatectomy (OP) in the large gland <sup>(2)</sup>. TURP is a very good and effective option but with many complications that may occur such as TURP syndrome and the need for a blood transfusion <sup>(3)</sup>.

New laser techniques, which were developed along the past years, have given us a lot of advantages compared to open or endoscopic modalities. These advantages are better control of bleeding, shorter hospital stay and minimum duration of both catheterization and postoperative irrigation <sup>(3)</sup>. Because of these positive points, there was a trend towards the implementation and development of laser techniques along the past years <sup>(4)</sup>.

For the prostate larger than 75 grams OP is the preferred technique in areas with restricted access to modern technology <sup>(5)</sup>. But unfortunately OP has more risks such as the need for a blood



transfusion and postoperative hemorrhage <sup>(6)</sup>. A lot of laser enucleation techniques were studied and Holmium Laser Enucleation Prostatectomy (HoLEP) proved its safety and efficacy in large prostate, but it was found that the literature did not provide sufficient effective randomized controlled trials comparing HoLEP to OP <sup>(7)(8)</sup>.

Consequently, our goal was to compare and evaluate the safety and efficacy of HoLEP and OP in large prostate volume more than 80 grams due to BPH in Egyptian Men.