1-1 Introduction:

Benign prostatic hypertrophy (BPH), also Known as benign prostatic hyperplasia, is a histologic diagnosis characterized by proliferation of the cellular elements of the prostate. Cellular accumulation and gland enlargement may result from epithelial an stromal proliferation, impaired preprogrammed cell death (apoptosis) or both.

BPH involves the stromal and epithelial elements of the prostate arising in the periurethral and transition zones of the gland. The hyperplasia presumably results in enlargement of the prostate that may restrict the flow of urine from the bladder.

BPH is considered a normal part of the aging process in men and is hormonally dependent on testosterone and dihydortestosterone (DHT) production. An estimated 50% of men demonstrate his to pathologic BPH by age 60 years. This number increases to 90% by age 85 years. The voiding dysfunction the result from prostate gland enlargement and bladder outlet obstruction (Boo) is termed lower urinary tract symptoms (LUTS). It has also been commonly referred to as prostatism, although this term has decreased in popularity. These entities overlap, not all men with BPH have (LUTS), and likewise not all men with (LUTS) have BPH. Approximately half of men diagnosed with histopathologic.

BPH demonstrate moderate – to – server LUTS. Clinical manifestations of (LUTS) include urinary frequency , urgency, nocturia (a wakening at night to urinate) , decreased or intermittent force of stream , or a sensation of incomplete emptying complications occur less commonly but may include acute urinary retention (AUR), impaired Bladder emptying , the need for corrective surgery , renal failure ,

recurrent urinary tract infection , Bladder stone, or gross hematuria.

Prostate volume may increase over time in men with BPH. In addition peak urinary flow, avoided volume, and symptoms may worsen over time in men with untreated BPH. The risk of AUR and the need corrective surgery increases with age. Patients who are not bothered by their symptoms and not experiencing complications of BPH should be managed with a strategy of watchful waiting.(10).

Patients with mild (LUTS) can be treated initially with medical therapy. Transurethral resection of the prostate (TURP) is considered the criterion standard for relieving bladder outlet obstruction (Boo) secondary to BPH. However, there are considerable invasive therapies to accomplish the goal of TURP while avoiding its adverse effects.(12).

1-2 Objectives:

- To evaluate the incidence of benign prostatic hypertrophy among an elder patients.

- To reveal the relation between benign prostatic hypertrophy and the residual urine.

1-3 Hypotheses:

- The incidence of prostatic enlargement is an extremely common in an elder Sudanese population.

- Ultrasound imaging is the best tool in detecting prostatic hypertrophy.

1-4 Material and methods:

*** Study area:**

It was done in Khartoum.

*** Population of study:**

All male patients referred to an ultrasound department for abdominal examination.

*** Population size:**

Would be fifty patient

*** Duration of the study:**

It takes three month

*** Data collection:**

Data was collection by collecting sheet for the target population

1-5 **Thesis scope:**

*** *Chapter one***

Introduction

* ***Chapter two***

Literature review (anatomy – histology – physiology – pathology – and ultrasonographic scanning of the prostate).

* ***Chapter three***

Material and methods.

* ***Chapter Four***

Results – data analysis

* ***Chapter five***

Discussion

* ***Chapter six***

Conclusion and recommendation.

* **References**

* **Appendix**