

## **ABSTRACT - DR. DEVINDRAN MANOHARAN**

### **Benign Prostate Enlargement- Basics of Clinical Approach**

Benign prostatic hyperplasia (BPH) refers to the nonmalignant growth or hyperplasia of prostate tissue and is a common cause of lower urinary tract symptoms in men.

Disease prevalence has been shown to increase with advancing age, reaching almost as high as with one in four Malaysian men above 60 years to be diagnosed with.

Standard investigation of BPH may include bedside urine dipstick, post-void residual, IPSS, and urine flow studies to establish if there is evidence of obstructive voiding.

Treatment options for BPH range from watchful waiting, to medical and surgical intervention.

Risk factors may be divided into non-modifiable and modifiable, with factors such as age, genetics, geographical location, and obesity, all shown to influence the development of BPH.

It is, therefore, important to be able to identify those at risk of disease progression and those who can be managed more conservatively to reduce associated morbidity and health care burden. Both static and dynamic components contribute to the pathophysiology of BPH.

Medical therapy aims to address both of these components. 5 Alpha-reductase inhibitors such as finasteride and dutasteride block conversion of testosterone to DHT. This addresses the static component of BPH by causing shrinkage of the prostate and takes several weeks to show noticeable improvement, with six months needed for maximal effectiveness.

As a result of treatment serum, PSA can be reduced by 50%, with prostate volume decreasing by up to 25%. This has been shown to alter the disease process and subsequent disease progression.

Patients with risk of progression and prostate volume more than 40ml can be initiated with combination of alpha blocker and 5ARI.

BPH outcome tool at [www.bphtool.com](http://www.bphtool.com) can help to visualize the impact of treatments and baseline parameters on patients long term progression. The early initiation of 5-ARI also reduces the risk of acute urinary retention and/or BPH surgery than delayed initiation.