

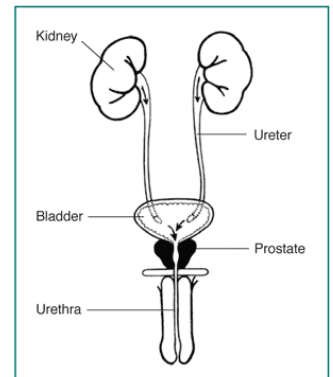
Family Medicine Clerkship Plain Language Summary Template

Title: α_1 -blocker and 5- α reductase inhibitor combination therapy for BPH

Name: Evans Roberts III, MS4

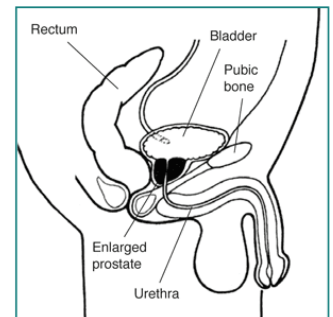
Plain Language Summary:

The prostate is a walnut-sized gland that forms part of the male reproductive system. The prostate's function is not fully known, but one function is to help squeeze fluid into the urethra as sperm move through during sexual climax. The prostate is located in between the bladder (where urine is stored) and the urethra (the tube urine passes through). As men age, the prostate slowly grows bigger. As the prostate gets bigger, it may press on the urethra and cause the flow of urine to be slower and less forceful. Doctors call this condition benign prostatic hyperplasia, or benign prostatic hypertrophy (BPH). Benign means the enlargement is not caused by cancer or infection. Hyperplasia or hypertrophy means enlargement.



Normal urine flow.

Symptoms of BPH start gradually. One symptom is the need to get up, more often at night, to urinate. Other symptoms include difficulty starting urine flow, and dribbling after urination ends. The size and strength of the urine stream may decrease. More serious conditions like bladder infection or bladder cancer may cause similar symptoms. Therefore, it is important to inform a doctor if any male experiences these symptoms. More than half of men in their sixties and as many as 90 percent of men in their seventies and eighties have symptoms of BPH.



To determine if symptoms are caused by BPH, a doctor will often take a complete history of the symptoms described by the patient. After this, a rectal exam is the next step. With a lubricated and gloved hand, the doctor will feel the prostate gland. An enlarged prostate can be felt on exam and suggests BPH. Other things the doctor may want to check include a urine sample, and a blood test. If these are unsuccessful in discovering a diagnosis, an ultrasound or biopsy may be ordered.

To treat BPH, there are several options. The most common way to treat BPH is with medications. Drug treatments like finasteride and dutasteride block a natural hormone that makes the prostate enlarge, but it does not help all patients. The side effects of finasteride are rare and mild, but often involve sexual function. The side effects will go away if the medication is stopped. However, the prostate may enlarge again when medication is stopped. Luckily, there are other medications available.

Another kind of medicine for BPH are called alpha-blockers. The medications have been used to treat high blood pressure for a long time. They can also help relieve symptoms of BPH, even in men with normal blood pressure. Terazosin, doxazosin, and tamsulosin are some of the more

common medications that are used for BPH. These medications may not work in all men. The side effects of alpha-blockers include dizziness, fatigue, and lightheadedness. The side effects go away if the medication is stopped. Like finasteride, if the medication is stopped, the prostate may continue to enlarge again. The combination of both medications is a successful way to help men with symptoms of BPH without requiring surgery. By using both medications, many men can avoid surgical treatment all together.

When medications are unsuccessful in treatment of BPH, there are alternative therapies. Surgical procedures which range from minimally invasive to open surgery are used to treat BPH that cannot be controlled with medications. Typically, these procedures are performed by a urologist. An urologist is a surgeon who operates on the pelvis to correct problems in the prostate, urethra, and bladder. Surgery is effective, but it has risks such as bleeding, infection or impotence. These risks are generally small. A primary care provider would refer someone to a urologist if a patient continues to have symptoms or symptoms become worse.

Additional Resources:

NIDDK: National Kidney & Urologic Diseases Information Clearinghouse (NKUDIC)
<http://kidney.nidk.nih.gov.ezp2.lib.umn.edu/KUDiseases/pubs/prostateenlargement/index.aspx>

Benign Prostate Hyperplasia (BPH): Mayo clinic
<http://www.mayoclinic.org/bph/>

Key Words:

Benign prostatic hyperplasia
Benign prostatic hypertrophy
Urinary Retention
Digital Rectal Exam
Nocturia

This document was created by a medical student enrolled in the Family Medicine Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up-to-date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.