Prostate Hypertrophy
A common disease of human male

SYED RIAZ BAQUAR*

Prostate is an accessory male reproductive organ of most mammalian animals, including human male. It lies within the pelvis below the bladders, encircling part of the urethra. Benign hypertrophy or non-cancerous enlargement of the prostate occurs in about 40% of all men over the age of 60. Normally it may not cause any problem unless its enlargement is sufficient leading to discomfort and ultimately causing pressure on the urethra and obstruct the outflow of urine. If not treated on time it may cause retention of urine and uremia.

Prostate gland is of the size and shape of a doughnut, weighing about 20 gms and encircling the urinary outlet. Contraction of the muscle in the prostate squeezes fluid into the urethral tract during ejaculation. The enlarged prostate presses against the urethral canal and interfere with normal urination. As a result urine may back up in the kidney thus damaging it, both due to excessive pressure and by contaminated urine.

The cause of hypertrophy is unknown but it is believed to be related to changes in the production or activity of the androgen. The ejaculatory ducts from the testes passes through prostate. About half of the prostatic tissue is composed of 30 to 50 small glands forming wedge shaped lobules. These lobules open into small excretory duct that unite to form 20 to 30 large ducts leading into the urethra. The remaining half of the tissue consists equally of involuntary muscles and connective tissues.

The prostate gland secretes a watery opalescent fluid that is discharged into the urethra. This fluid is slightly alkaline and its main constituents are the enzyme fibrinolysin and acid phosphate, calcium and citric acid. The fluid is not essential to sexual function but it does stimulate the sperm to greater motility. Fibrinolysin maintains the fluidity of the semen by liquefying coagulating semen. An enlarged prostate is not cancerous but can cause disability and even serious illness if left untreated.

Symptoms of benign prostate hypertrophy typically include progressive urinary frequency, nighttime awaking to empty the bladder, pain, burning, difficulty in starting and stopping urination and an inability to empty the bladder fully. As said earlier, it may result in kidney infection, bladder infection and cystitis, if left untreated.

Prostate Cancer:
Prostate hypertrophy if untreated for a long time may lead to cancer. The enlargement of gland may spread to other region of the body.

A cancerous prostate secretes an abnormally large amount of acid phosphate and an elevated concentration of this enzyme in the blood and urine is diagnostic. Prostate cancer occurs most often in men over 60 years of age. Infection of prostate is referred to as prostatitis. It usually results from an infection of kidney, bladder, ureter or urethra. Gonorrhoea is one of the common causes. It may result in acute fever and chill and urination may be difficult. Abscess may form if the infection is not treated.

The gland is usually removed surgically. Besides surgical operation, various other line of action has been suggested for the treatment of enlarged prostate.

Antibiotic and analgesics besides several new drugs are available on the market, such as Proscar, Xatral and Avodart. These drugs help in shrinking the prostate by interfering the production of the hormone that stimulates growth. Side effect including impotence, decreased libido and decreased volume of ejaculation were reported to be minimal; occurring only in 4% patients.

Acupuncture, Ayurvedic medicines and botanical therapies, such as berries from the saw palmetto plant are shown to relieve symptoms and stimulate immune function in clinical studies. Berries from the plant contain approximately, 15% saturated and unsaturated fatty acid, which significantly reduces, prostatic swelling in patients of Prostatic Hypertrophy.

The bark of the Pygeum african tree, taken in powder form, has been used in Europe for centuries to treat urinary disorder. Clinical trial in humans have shown that this herb can reduce prostate swelling, associated with benign prostate hypertrophy, with no toxic side effect.