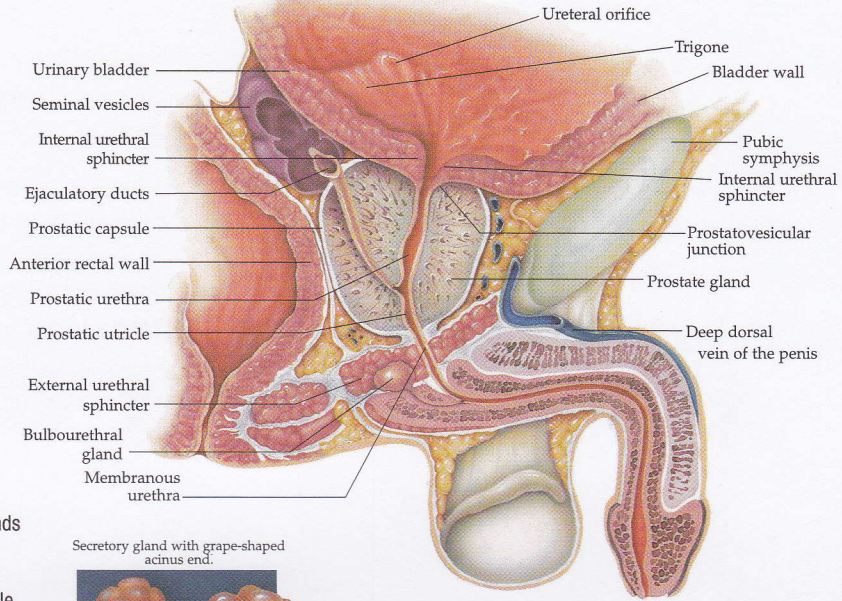
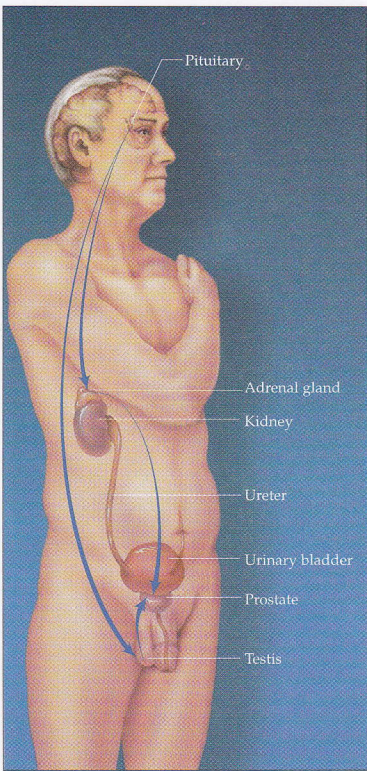


The Prostate

What is the Prostate

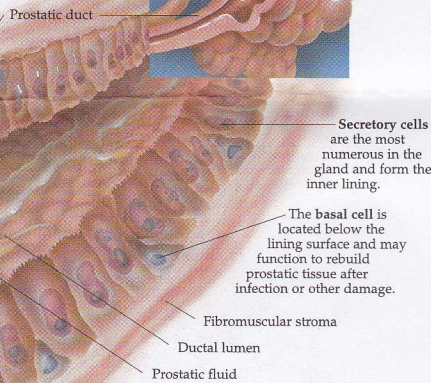
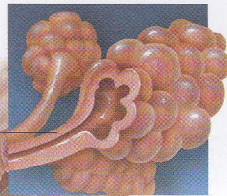
The prostate is a gland consisting of fibrous, muscular and glandular tissue surrounding the urethra below the urinary bladder. Its function is to secrete prostatic fluid as a medium for semen, helping it to reach the female reproductive tract. Within the prostate, the urethra is joined by two ejaculatory ducts. During sexual activity, the prostate acts as a valve between the urinary and reproductive tracts. This enables semen to ejaculate without mixing with urine. Prostatic fluid is delivered by the contraction of muscles around gland tissue. Nerve and hormonal influences control the secretory and muscular functions of the prostate.



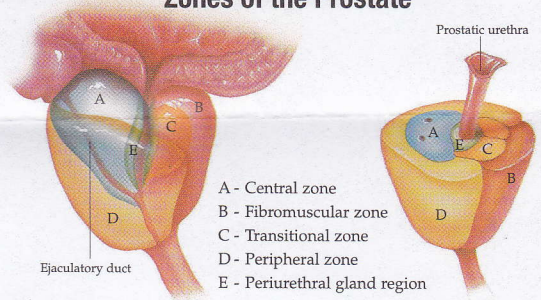
Glands of the Prostate

The prostate is mainly filled with secretory glands. These glands are made of many ducts with grape-shaped sacculle ends or "acini". Secretory cells lining the ducts are stimulated by hormones to expel prostatic fluid. During sexual activity muscle contracts and secretes prostatic fluid. The basal cell, also found lining the ducts of the prostate, may be responsible for most types of prostatic hyperplasia as a result of uncontrolled prostatic tissue growth.

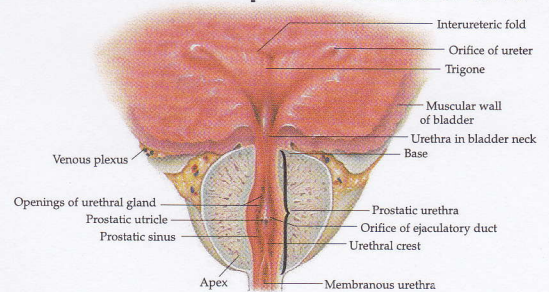
Secretory gland with grape-shaped acinus end.



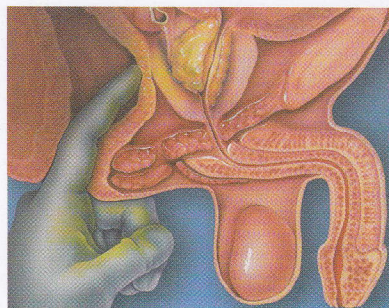
Zones of the Prostate



Anterior View with Exposed Prostatic Urethra

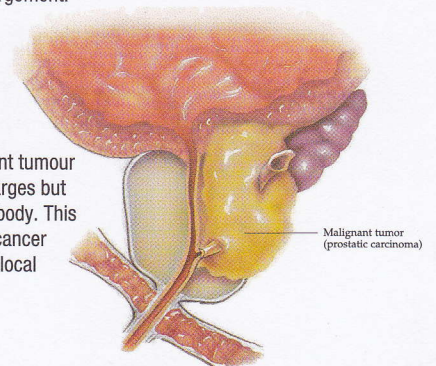


A **digital rectal exam** is useful in detecting early signs of prostatic enlargement.



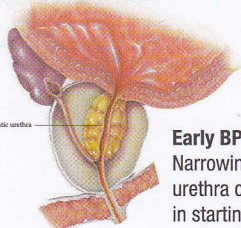
Prostate Cancer

Prostate carcinoma is the most common malignant tumour in men. Unlike BPH, prostate cancer not only enlarges but also metastasizes (spreads) to other parts of the body. This disease is complicated by the simple transfer of cancer cells directly to other parts of the body through a local plexus of veins.

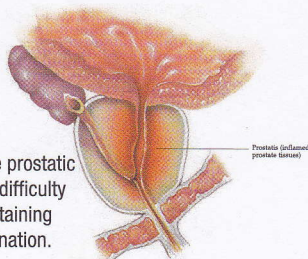


Benign Prostatic Hyperplasia (BPH)

Benign Prostatic Hyperplasia (BPH), is the most common type of tumour in mature men. It is a benign growth, which means it may enlarge but will not spread to other locations in the body. The tumour can cause discomfort and may grow to completely close the bladder neck, preventing urination. This condition occurs because the tumour usually grows in the transitional zone and periurethral gland region located at the prostate base near the bladder neck.



Early BPH: Narrowing of the prostatic urethra causing difficulty in starting, maintaining and stopping urination.



Prostatitis is an uncomfortable condition in which the prostate becomes inflamed and swollen due to an infection. Prostatitis can make urinating painful.

	Not at all	Less than 1 time in 5	About half the time	More than half the time	Almost always	patient score
1. Incomplete emptying Over the past month, how often have you had a sensation of not emptying your bladder completely after you finished urinating?	0	1	2	3	4	5
2. Frequency Over the past month, how often have you had to urinate again less than 2 hours after you finished urinating?	0	1	2	3	4	5
3. Intermittency Over the past month, how often have you found that you've stopped and started again several times when you urinated?	0	1	2	3	4	5
4. Urgency Over the past month, how often have you found it difficult to postpone urination?	0	1	2	3	4	5
5. Weak stream Over the past month, how often have you had a weak urinary stream?	0	1	2	3	4	5
6. Straining Over the past month, how often have you had to push and strain to begin urination?	0	1	2	3	4	5
7. Nocturia Over the past month, how many times did you most typically get up to urinate from the time you went to bed at night until the time you get up in the morning?	0 None	1 Time	2 Times	3 Times	4 Times	5 Times

	Delighted	Pleased	Mostly satisfied	Mixed	Mostly dissatisfied	Unhappy	Terrible
Quality of life due to urinary symptoms. If you were to spend the rest of your life with your urinary condition the way it is now, how would you feel about that?	0	1	2	3	4	5	6

Quality of life Assessment index QOL = **Total I-PSS* score** /35

* The International Prostate Symptom Score (I-PSS) is an important aspect of the initial evaluation in patients suspected with BPH.
 American Urological Association (AUA) Symptom Score Index. These symptom scores are identical and consist of seven questions relating to the severity of symptoms, as well as a separate question about the bothersomeness of the symptoms. The maximum possible score is 35; scores 0 – 8 are generally regarded as mild, 9 – 19 as moderate, and 20 or above as severe. The I-PSS* and AUA scores are used to measure symptom severity only, and are not a diagnostic test to determine whether symptoms are due to BPH.