

## THE PROSTATE GLAND

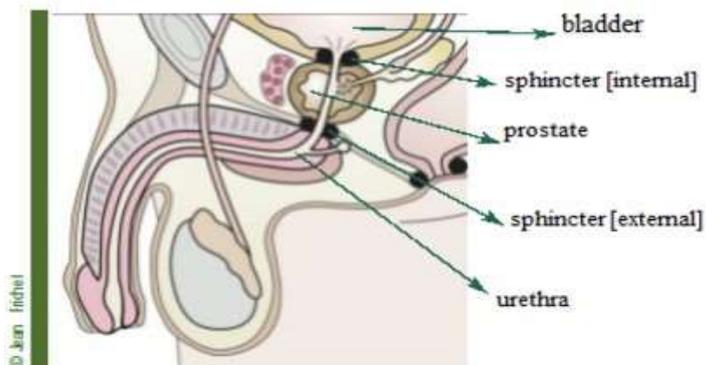
What is the prostate and what does it do? It is a small gland, usually about the size of a walnut, deep inside the pelvic region of the body.

It secretes a prostatic fluid which is a major component of a mans semen and it plays a role in the muscle contraction called orgasm that signals the end of a normal sex act, or at least the end of the erection.

Why is the prostatic fluid so important? In order for a single sperm to fertilise an egg produced by a womans ovaries the sperm must first get out of the ejaculate - the clump of tens of thousands of sperm cells produced by the testicles (testes). The prostate produces certain chemical substances which helps the separation of individual sperm from the seminal fluid.

This separation is essential to allow sperm to swim a huge distance in relative terms, and at very considerable speed relative to their size, to meet up with an egg before any other sperm can do so.

**Fig. 1 Groin area shown in cross-section**



Is there anything about the physical location of the prostate that is troublesome for a man?

Yes, the tube carrying urine (the urethra) from the bladder to the penis runs right through the prostate gland, so some conditions of the prostate can cause urinary problems, unless treated. In other cases the treatment itself may give rise to urinary

problems. The prostate gland lies close to the bladder and rectum which means that certain treatments of the prostate have a risk of some damage to these organs.

The various treatments for prostate cancer may cause a number of unwanted side effects after treatment - such as urinary incontinence (leakage), especially as the urethra runs through the prostate gland, or erectile dysfunction as the nerves controlling erections run along the external walls of the prostate and may be damaged by treatment.

**Fig. 2 Location of the prostate in relation to other tissue shown in cross section**

