

What is an enlarged prostate?

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\* Article history

As you get older, your prostate can get bigger. When this happens, doctors call it benign prostatic hyperplasia, or BPH. This condition is not cancer, and it isn't usually a serious health problem. But it can cause irritating symptoms, such as having to get up at night to urinate.

If you can cope with the symptoms of an enlarged prostate, you may not need any treatment. But, even if your symptoms are mild, it's important to get them checked by your doctor to make sure that you don't have a more serious condition. And if you do need help for BPH, your doctor can provide treatments to help your symptoms.

Most men find it difficult to talk to their doctors about prostate problems. But don't be embarrassed. Your doctor will have helped many men with your symptoms.

Key points for men with an enlarged prostate

\* Having an enlarged prostate is common, especially among older men. Symptoms include getting up at night to pass urine, having a weak urine stream and having to strain to pass urine.

\* BPH isn't serious, but the symptoms can be similar to those of more serious conditions. So it's important to see your doctor.

\* BPH is often slow to develop, and it doesn't always get worse. Your doctor may try different treatments to work out which one is best for you.

\* A wait-and-see approach (called 'watchful waiting' or 'active monitoring') is becoming more widely used. Traditional surgery for BPH is becoming less common. This operation is called transurethral resection of the prostate, or TURP.

\* Drugs, herbal treatments and surgery can help your symptoms.

\* If you do opt for surgery, there are new ways of doing it. For many of these new procedures, you don't need a general anaesthetic to make you sleep during the operation.

To understand BPH and its treatments, it's helpful to know where the prostate is and how it works. The symptoms of the disease will also make more sense if you know how your prostate is linked to other parts of your body.

What is the prostate and what does it do?

Only men have a prostate. Doctors call it the prostate gland. (Glands make substances that are used somewhere else in the body.) The prostate is a small, solid gland about the size of a walnut. It helps to make the milky fluid that comes out of your penis when you ejaculate. The fluid from your prostate helps keep your sperm healthy and helps them swim.

Where is the prostate?

The prostate (in red) lies beneath your bladder.

\* Your prostate is at the base of your bladder, the sac (made of muscle) that holds your urine. You can think of the prostate as a walnut resting against a bag of water.

\* The front of your prostate is wrapped around your urethra, the tube that runs from your bladder and through your penis. The urethra carries urine and semen out of your body (semen is the name for your sperm and the fluid they are carried in). Any change in the size or shape of your prostate can narrow this tube, making it difficult for you to urinate.

\* The back of your prostate presses against your back passage (rectum). This is why your doctor examines your rectum if there's a problem with your prostate. He or she can feel the gland through the wall of your rectum.

\* The two bundles of nerves that control your erections run on either side of your prostate. Because these nerves are so close to your prostate, they can be damaged by surgery on the gland.

\* Your prostate is also linked to your testicles. These are the two organs that make sperm and the male hormone testosterone. They lie in a pouch of skin on either side of your penis. Your sperm are carried by tubes that run from your testicles and through your prostate into your urethra. Your prostate adds its fluid to the sperm when they reach your urethra.[1]

If you want to find out more about how your prostate works, see [More about what the prostate does](#).

What happens when a prostate gets bigger?

It's normal for the prostate to grow as boys reach puberty (the time when their sex organs mature). At this time, their bodies start to produce more male sex hormones (called androgens). The main one is called testosterone.

It makes your prostate grow at puberty, and it also helps your prostate make fluid to carry your sperm.

Your prostate reaches its adult size by around the time you're 20. Then, at around age 50, it starts growing again in some men.[2] Doctors aren't sure why this is, but it's probably linked to hormone changes. One theory is that, as you get older, the cells in your prostate get more sensitive to the androgens in your blood and this makes the cells grow.[3]

The condition of your prostate starting to grow again as you get older is called benign prostatic hyperplasia, or BPH. 'Benign' means that the condition isn't cancer. 'Hyperplasia' means normal cells are multiplying more quickly than usual. Even though this condition is not cancer, it may lead to annoying symptoms. For more, see [What are the symptoms of an enlarged prostate?](#)

A large prostate is about the size of an apple, and a very large one could be as big as a grapefruit.

What causes the symptoms of BPH?

Doctors used to think that the symptoms of an enlarged prostate were caused simply by it pressing on the urethra and restricting the flow of urine from the body.

But some men with a large prostate have no problems urinating, and some men with a small prostate do.

Doctors now know that some symptoms can be caused by changes in your bladder that are triggered by changes in your prostate.[3] For example, the wall of your bladder may become thick and irritable. This can make your bladder contract (get smaller) when it contains only small amounts of urine. (Normally your bladder contracts when it is full of urine.) This makes you feel like you need to urinate more often.

Eventually your bladder may become so weak that it can't empty itself. If urine remains in your bladder, it can get infected. A bladder infection is called cystitis.[4] To read more, see Complications of an enlarged prostate.

The good news is that lots of treatments are available for BPH. By getting treatment as soon as possible, you may prevent future problems with your bladder. Remember that doctors see men with these symptoms every day, so you shouldn't feel awkward about your condition.

Why me?

There are some things that make it more likely that you will get an enlarged prostate. These things are called risk factors.

- \* Your age: Your chances of getting an enlarged prostate increase as you get older.[4]

- \* Your family history: Enlarged prostates seem to run in some families. If your father or brother has had BPH, then you are at greater risk of getting it.

- \* Your race: Black men seem to have enlarged prostates that need surgery more often than white men do. And Asian men seem to be less likely than white men to need surgery. These trends need more study, and may be due to things such as diet.[5] [6] [7]

References

Carroll PR, Lee KL, Fuks ZY, et al. Cancer of the prostate. In: DeVita VT, Hellman S, Rosenberg SA. Cancer: principles and practice of oncology. 6th edition. Lippincott, Williams and Wilkins, Philadelphia, U.S.A.; 2001.

Guyton AC, Hall JE. Reproductive and hormonal functions of the male. In: Textbook of medical physiology. 10th edition. WB Saunders, Philadelphia, U.S.A.; 2000.

McConnell J. Epidemiology, etiology, pathophysiology, and diagnosis of benign prostatic hyperplasia. In: Campbell MF, Walsh PC, Retik AB (editors). Campbell's Urology. 8th edition. WB Saunders, Philadelphia, U.S.A.; 2002.

Medina JJ, Parra RO, Moore RG. Benign prostatic hyperplasia (the aging prostate). Medical Clinics of North America. 1999; 83: 1213-1229.

Sideny S, Quesenberry CP, Sadler MC, et al Incidence of surgically treated benign prostatic hypertrophy and of prostate cancer among black and white multiphasic examinees in a prepaid health care plan. American Journal of Epidemiology. 1991; 134: 825-829.

Platz EA, Kawachi I, Rimm EB, et al. Race, ethnicity and benign prostatic hyperplasia in the health professionals follow-up study. Journal of Urology. 2000; 163: 490.

Lagiou P, Wu J, Trichopoulou A, et al. Diet and benign prostatic hyperplasia: a study in Greece. Urology. 1999; Aug;54(2):284-90.

## Glossary

general anaesthetic

You may have a type of medicine called a general anaesthetic when you have surgery. It is given to make you unconscious so you don't feel pain when you have surgery.

gland

A gland is any group of cells in the body that makes and releases something for use by another part of the body. For example, the thyroid gland makes a hormone called thyroxine. This acts on receptors within cells. By acting on the receptors it gives the cells a message to speed up their metabolism and work harder.

rectum

The rectum is the last 15 to 20 centimetres (six to eight inches) of the large intestine, ending with the anus (where you empty your bowels from).

hormones

Hormones are chemicals that are made in certain parts of the body. They travel through the bloodstream and have an effect on other parts of the body. For example, the female sex hormone oestrogen is made in a woman's ovaries. Oestrogen has many different effects on a woman's body. It makes the breasts grow at puberty and helps control periods. It is also needed to get pregnant.

urethra

Your urethra is the tube that carries urine from your bladder out of your body. In a man, the urethra runs through the inside of the penis. In a woman, the urethra is shorter and opens onto the top of the vagina.

bladder

Your bladder is the hollow organ at the top of your pelvis that stores urine. It is similar to a balloon, only with stronger walls. It fills up with urine until you go to the toilet.

cystitis

Cystitis is inflammation of your bladder. It can make you feel as if you want to urinate all the time. The term is often used to describe a urinary tract infection that involves your lower urinary tract (your bladder and urethra) but not your kidneys. These infections are most often caused by bacteria.

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<http://www.guardian.co.uk/lifeandstyle/besttreatments/prostate-enlarged-description>