

ERECTILE DYSFUNCTION

Patient Information Fact Sheet

›What is erectile dysfunction?

Erectile dysfunction, often referred to as impotence, is the inability to have or maintain an erection sufficient for sexual activity. It is a common problem affecting around one in every 10 men at some time in their lives and tends to affect men increasingly as they get older. Erectile dysfunction used to be regarded as an entirely psychological problem, but it is now known that in about 90% of sufferers there is a physical cause.

›What causes erectile dysfunction?

Most men will suffer occasional episodes of erectile dysfunction at some time in their lives, which may be caused by factors such as excess alcohol or stress and anxiety. Previous erectile failure for one of these reasons may cause anxiety and so the problem can repeat itself. If you can achieve an erection on some occasions and not others, the cause is likely to be psychological. There are many possible psychological causes, including depression or sexual boredom or conflicts with a partner, which may lead to temporary sexual dysfunction with that partner. In addition, uncertainty about sexual orientation (ie, whether heterosexual or homosexual), can cause problems. Excessive stress and anxiety at work may cause a temporary or long-term problem depending on whether the stress is short-term or permanent.

If erectile dysfunction is the result of a physical problem, the decline in sexual function is usually gradual. A number of physical conditions may result in erectile dysfunction. For example, if the arteries supplying the penis become blocked (atherosclerosis) the blood supply to the penis may not be sufficient to sustain an erection. The arteries can become blocked in the same way that arteries to the heart become blocked, as a result of smoking or high cholesterol levels.

Neurological diseases or disorders of the nerves that go to the penis, eg, in spinal cord injury, can also affect sexual function, as can a stroke. There are several other conditions that can cause erectile dysfunction, including diabetes, kidney failure, liver failure, hypogonadism (low levels of male hormone testosterone), high blood pressure and alcoholism.

Erectile dysfunction may also occur as a side effect of some drug treatments, for example, some treatments for high blood pressure. If you are taking medicine for high blood pressure and are experiencing erection difficulties, do not stop taking the tablets without consulting your GP. High blood pressure must be controlled and stopping the medication can put you at risk of other problems. Alternative treatments for high blood pressure are available and the problem may be resolved by a change in medication. Some drugs, particularly antidepressants, can cause lethargy or weight gain and may affect libido (sexual interest). Some medications given for serious mental illness may also affect the ability to achieve orgasm, while some medicines for anxiety or high blood pressure may delay or prevent orgasm. Use of certain illegal drugs may also cause sexual problems.

›What tests confirm a diagnosis of erectile dysfunction?

If appropriate, your doctor will prescribe medication for erectile dysfunction. If drug treatment is successful, there may be no need for further referral. Some men may be referred to a urologist for further tests to define the cause of the erectile dysfunction before treatment is started. A blood sample may be taken in order to measure testosterone levels. If a problem concerning the blood supply is suspected, x-rays of the arteries and measurement of the pressure inside the penis may be necessary.

›How is erectile dysfunction treated?

If erectile dysfunction is the result of psychological factors, the cause needs to be addressed. Psychosexual or relationship counseling may be appropriate. Methods of coping with stress may also be helpful; sometimes reducing stress may solve sexual problems.

If erectile dysfunction is a side effect of medication, changing to an alternative treatment may solve the problem.

In a small proportion of men, erectile dysfunction is caused by a reduced level of testosterone. This can be corrected by androgen replacement therapy, which may be given in the form of **testosterone** supplied as skin patches (Androderm), tablets (Methitest), or capsules (Android). Testosterone may also be given as regular injections or as implants under the skin. It is also available as a gel (Testim, AndroGel). **Alprostadil** is a drug that can be injected directly into the shaft of the penis and usually causes an erection within 15 minutes. The administration technique, called intracavernosal injection, is quite easy to teach most men. Alprostadil injection may be prescribed as Caverject or Edex. Alprostadil can also be given directly into the urethra (the tube that runs through the penis) in a suppository form known as Muse. Muse suppositories cause an erection within five to 10 minutes and are available in different strengths. Alprostadil may cause erections that are prolonged and painful and advice should be given about what action to take if this happens, as there is a risk of damage to the penile nerves.

Currently, there are three oral treatments for erectile dysfunction that can be prescribed for men who meet certain criteria: **sildenafil** (Viagra), **tadalafil** (Cialis) and **ildenafil** (Levitra, Staxyn). These treatments are intended for use only by men with erectile dysfunction. These medicines are not suitable for everyone, for example, men with recent stroke, severe heart disease or angina being treated with nitrates. These medicines should not be used in conjunction with other treatments for erectile dysfunction.

If drug treatment is unsuccessful, vacuum constriction devices are available. These draw blood into the penis and create an erection that can be maintained for up to 30 minutes by a tension band slipped around the base of the penis. A range of vacuum constriction devices is now available for men who meet certain criteria. Alternatively, a prosthesis can be surgically inserted. This should not be considered until all other treatment options have been tried as the insertion destroys the erectile tissue. One option is a semi-rigid splint, which creates a permanent erection but allows the penis to be bent out of the way. Another option involves the insertion of a small pump in the groin, which activates a hydraulic device causing an erection when required. If there is an abnormality in the blood supply to the penis, surgical correction of the problem may be possible in some cases.

›Further information

National Kidney and Urologic Diseases Information Clearinghouse: www.kidney.niddk.nih.gov

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