

# Erectile dysfunction

March 2016

#### What is it?

Erectile dysfunction (ED) is when you are unable to get or keep an erection suitable for sexual intercourse or another chosen sexual activity.

#### How common is it?

It is very common; half of men between the ages of 40 and 70 years will have it to some degree. This means there are several million men in the UK suffering from ED and the numbers increase with age. Sadly, only a small percentage of sufferers actually receive treatment.

#### How is it caused?

Most men occasionally fail to get or keep an erection. This usually results from stress, tiredness, anxiety or excessive alcohol consumption and is nothing to worry about. However, worrying about it can increase the likelihood of it happening again due to 'fear of failure'. Until about 20 years ago, ED was thought to be almost entirely due to psychological causes (in the mind). But we now know that physical causes (in the body) are more likely, and the most common of these is disease of the blood vessels which supply blood to the penis (atherosclerosis). However, most men with ED have a combination of psychological and physical causes, with one affecting the other.

#### Physical causes

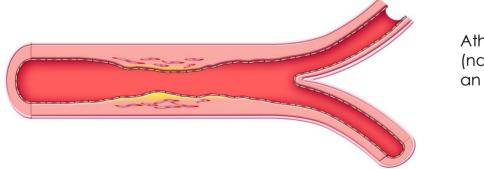
Men whose ED is due to physical causes often experience a gradual onset of erectile problems, which usually occur with all sexual activities.

Physical causes of ED include:

- Vasculogenic conditions (which affect blood flow to the penis) including disease of the heart or blood vessels (cardiovascular disease (CVD)), high blood pressure, raised cholesterol and diabetes
- Neurogenic conditions (which affect the nervous system) including multiple sclerosis,
  Parkinson's disease, stroke, diabetes and spinal injury or disorder
- Hormonal conditions (which affect the hormones) including an overactive thyroid gland, an underactive thyroid gland, hypogonadism (low testosterone level), Cushing's syndrome (high cortisol level), a head or brain injury recently or in the past and subarachnoid haemorrhage or radiation to the head (these may cause hormonal changes, particularly a low testosterone)
- Anatomical conditions (which affect the structure of the penis) including Peyronie's disease
- Surgery and radiation therapy for bladder, prostate or rectal cancer
- Injury to the penis
- Side effect of prescribed drugs
- Recreational drug use
- Excessive alcohol consumption

ED is also more likely to occur in people who smoke, are overweight and/or are not active enough.

If atherosclerosis is the cause of your ED, this narrowing is likely to affect other blood vessels in the body as well, including the arteries that supply blood to the heart. This means ED can be an early warning sign of future heart problems, appearing some 3-5 years before a heart complaint. You may therefore be able to prevent a future heart problem from occurring if you see your doctor for treatment soon after your ED starts (see our factsheet 'Erectile dysfunction and the heart').



Atherosclerosis (narrowing) of an artery

Hormone problems may be a more common cause of ED than once thought. The most frequently seen of these is reduced testosterone (male sex hormone), which can occur in men of all ages, including the elderly. The current guidance on the use of testosterone replacement therapy in men recommends that that when they first see a doctor for ED and/or reduced libido ('sex drive'), they should have their testosterone measured in the morning on at least two occasions (see our factsheet '<u>Testosterone deficiency</u>').

If you have ED and ride a bike for more than three hours a week, your doctor may recommend you try a period without cycling to see if this helps improve things. It is important to make sure you are sitting in the correct position with a properly fitted, comfortable seat - some are specifically designed to relieve pressure on the blood vessels and nerves supplying the penis.

#### Psychological causes

A psychological cause of ED is more likely if:

- Your erection is fine except with your partner
- You are suffering stress and anxiety from work or home (money or family)
- There are marital rows and dissatisfaction (which may also cause premature ejaculation)
- You are depressed
- Failing once is followed by fear of subsequent failure
- Your partner has sexual problems
- You are bored sexually
- You are worried about your sexual orientation
- You have suffered previous sexual abuse

#### When should you seek help?

If you have been suffering with ED for more than a few weeks, it is wise to see your doctor, because it may be a warning sign of other more serious health problems.

Many men find it very difficult to talk about such a personal problem as being unable to get an erection and may put off asking for help for 2 years or more. However, GPs are trained to deal with ED and in the end it's usually not as embarrassing as was feared.

# How is it diagnosed?

To diagnose the cause(s) of your ED, your doctor will ask you about your sexual history, diet and lifestyle. You will have an assessment, which includes measurement of your height, weight and waist. You will also need a medical, which includes:

- Heart and lungs check
- Blood pressure check
- A quick check of your genitals to rule out any obvious physical abnormality
- Cholesterol check
- Diabetes test
- A morning check of your testosterone (see our factsheet 'Testosterone deficiency')

If you have symptoms of an enlarged prostate gland, such as a weak stream and/or urgent and/or frequent urination, your doctor may also need to examine your prostate.

If you do not want to talk to your GP about ED, you can visit a genitourinary medicine (GUM) clinic. Their details can be found on the British Association for Sexual Health and HIV (BASHH) website www.bashh.org You can also see a sex therapist (see the following section on 'Sex therapy')

#### How is it treated?

ED treatment involves tackling the cause of the problem, whether this is physical, psychological or a mixture of both. There have been major advances in the treatment of ED and most sufferers can now be treated effectively.

If atherosclerosis is causing your ED, your doctor may recommend some lifestyle changes, which will also improve your general health and help protect your heart. These include:

- Stopping smoking
- Limiting the amount of alcohol you drink to no more than 14 units a week
- Losing weight if you are overweight (see out factsheet 'Body Mass Index (BMI)')
- Eating a healthy Mediterranean-style diet (see out factsheet 'The Mediterranean diet')
- Taking moderate daily exercise
- Trying to reduce stress and anxiety

Your doctor may also prescribe medications to treat atherosclerosis (such as cholesterollowering statins and drugs to lower your blood pressure).

If lifestyle changes fail to improve things, tablets are usually the first line treatment. These are called phosphodiesterase (pronounced phos-pho-di-es-ter-ase) inhibitors (PDE5i) and include tadalafil (Cialis®), vardenafil (Levitra®), sildenafil (Viagra®) and avanafil (Spedra®). PDE5i work for many men but they will not cause an erection unless the man is mentally AND physically stimulated (see our factsheet 'Oral treatment for erectile dysfunction').

A drug called alprostadil (which is the same as a chemical that the penis produces naturally when it becomes erect) can be injected into the shaft of the penis. This allows more blood to flow into the penis and get trapped there, which helps you get and keep an erection. Injection therapy is very successful in those men who do not respond to tablets. There are two types of alprostadil injections available, Caverject® and Viridal®.

Invicorp is another type of injection therapy used to treat ED. It contains two active ingredients (aviptadil and phentolamine mesilate); one increases blood flow to the penis to help you get an erection while the other helps trap the blood there to keep the erection. Invicorp may work well for men who have found little success with other ED treatments and some may find it less painful to use than alprostadil injections.

Another option is to insert a pellet (MUSE®) that contains alprostadil into the urethra (the tube through which you pass water) after urinating. The pellet dissolves and gives you an erection.

Alprostadil can also be used topically as a cream (Vitaros®) which is applied to the penis. For more information on injection, urethral and topical treatments for ED, see our factsheet 'Injection, urethral and topical treatments for erectile dysfunction'

Vacuum devices draw blood into the penis to get an erection, and it is trapped there with a special ring at the base of the penis to keep the erection. These devices suit some people well (see our factsheet 'Vacuum pump treatment for erectile dysfunction')

Testosterone replacement therapy may be required if you are found to have low levels of this hormone (see our factsheet '<u>Testosterone deficiency</u>').

Surgically implanted devices (penile prostheses), which strengthen the penis from inside, are available for the very few men who cannot get an erection in any other way.

Research has suggested that a small number of men with ED may benefit from exercises to strengthen the pelvic floor muscles. These lie underneath the bladder and back passage, and at the base of the penis. If your doctor thinks this approach may benefit you, they will refer you to a physiotherapist.

#### Sex therapy

Sex therapy is talking therapy where an individual or couple work with an experienced therapist to assess and treat their sexual and/or relationship problems. Together they will identify factors that trigger the problems and design a specific treatment programme to resolve or reduce their impact.

Sex therapy is considered highly effective in addressing the main causes and contributing factors of sexual difficulties. And it helps people to develop healthier attitudes towards sex, improve sexual intimacy, become more confident sexually, and improve communication within the relationship.

Sex therapy can also be used in combination with other forms of treatment.

Your GP or another health professional on the NHS may be able to refer you for sex therapy (depending on area), or you can contact a therapist directly and pay privately. It is important to make sure that they are qualified and are registered with an appropriate professional body. You can find more information on sex therapy in our factsheets 'Sex therapy' and 'How to find, choose and benefit from counselling support'

## Will your age affect your treatment?

While you are more likely to suffer with ED as you get older, it is your attitude not your age that is the biggest barrier in treating the condition. While some older men and their partners accept loss of erectile function as a normal part of ageing and do not want treatment, others are unhappy about losing such an important part of their lives. It is

perfectly normal for men and women to continue an active sex life way into old age and no one should be denied treatment for ED just because they are considered too old. Don't be put off, you need to stay as fit and healthy as you can. If you have a partner, it is important to talk to them and also make sure that your doctor is aware of your treatment. Men in their 90's are now seeking treatment for ED and usually respond to one of the available options.

### Where can you get more information?

The Sexual Advice Association is here to help. We cannot give individual medical advice, but we can answer your questions on any sexual problems and put you in touch with local specialist practitioners. We also have a number of factsheets and booklets on sexual problems and related issues for men and women that can be downloaded from our website or requested. Please feel free to email us or phone our Helpline (our contact details are at the bottom of this page).

You can also visit the NHS Choices website at <a href="www.nhs.uk/">www.nhs.uk/</a> for information and advice on many different health and lifestyle topics.

# What is the Take Home Message?

ED may be a warning of a future heart problem – heed the warning because your life may depend on it – get checked out!

# **Further reading**

Download or request our booklet 'Sex and the heart' and/or our factsheet 'Explaining sexual problems to your GP'

#### **Donate**

By donating to the Sexual Advice Association, you will know that you are helping improve the lives of people living with sexual problems. If you are interested in donating, please click here or contact us for more information (details at the bottom of this page).

# Thinking About Sex Day: February 14th

Launched by the Sexual Advice Association, Thinking About Sex Day (TASD) is designed to encourage everyone to think about the physical and psychological issues surrounding sexual activity.

