



## **Education**

### **Erectile Dysfunction**

#### **What is erectile dysfunction?**

Erectile dysfunction is trouble having an erection or not being able to keep an erection long enough to finish having sex. Another term for this problem is impotence.

It is normal for most men to have trouble having an erection sometimes when they are tired or nervous. When erectile dysfunction becomes a pattern or a long-lasting problem, it can deeply affect the emotional lives of men and their sex partners.

Erectile dysfunction affects older men more than younger men. Midlife and the later years bring changes in circulation that may affect the sex organs. Couples need to be more open and understanding with each other about sexual problems such as erectile dysfunction.

Fortunately, there are many effective treatments for erectile dysfunction.

#### **How does it occur?**

An erection is caused when there is increased blood flow into the penis. The penis becomes stiff when veins in the penis clamp down, trapping the blood. Nerves in the penis provide feelings of pleasure and help maintain the erection until ejaculation.

There are many possible physical and nonphysical causes of erectile dysfunction, including:

- trouble with the blood flow to the penis
- eating or drinking too much, which diverts blood to the organs involved in digestion
- being very tired or having jet lag
- fear of failure at intercourse
- loss of interest in sex
- depression, stress, or anxiety
- diabetes
- diseases or injuries of the nervous system, such as paralysis of the lower body or multiple sclerosis
- alcohol or drug abuse
- low levels of male hormone (testosterone)
- side effects of medicines for heart disease, high blood pressure, epilepsy, and mental or emotional problems
- problems after radical surgery for prostate cancer.

#### **How is it diagnosed?**

If erectile dysfunction lasts longer than 2 months or is a recurring problem, see your health care provider for a physical exam. You may be referred to a doctor who specializes in erectile problems.

The exam will include urine and blood sugar tests so that the doctor can rule out diabetes. In addition, the doctor may want to measure the level of testosterone, a male hormone in your blood.

The doctor may want to test penile blood flow and pressure. He or she may also want to measure the nighttime stiffness of the penis by the snap gauge test or stamp test.

In the snap gauge test, a band is placed around the penis before you go to sleep. If there is an erection, the snap gauge will break.

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For the stamp test, you take a strip of stamps (such as Easter Seals) and make a ring around the nonerect shaft of the penis. Moisten and seal the stamp overlap before going to sleep. Do not use postage stamps because the glue is too strong. If you have an erection during sleep, the stamp ring will break. This will wake you up and allow you to feel the degree of erection. Awakening the next morning with the ring intact means you did not have an erection while you were asleep. Repeat the test the next two nights. If the stamp ring is intact three times, you probably have impaired blood flow in your penis.

If the doctor has ruled out physical problems as a cause of erectile dysfunction, he or she may refer you and your partner to a psychotherapist or family counselor.

Psychological problems causing erectile dysfunction are varied but most can be helped. Therapy often leads to improved function in other areas of life as well as in sexual function. Psychotherapists often like to work with both partners. Therapy, like other treatments, can be uncomfortable but worthwhile. If you have concerns about your referral, discuss them with your primary doctor.

### **How is it treated?**

If you have problems with blood flow or blood pressure to your penis, you may have several options.

### **Drug Treatment**

Medicines called PDE-5 inhibitors are often used to treat erectile dysfunction. These medicines include Viagra, Levitra, and Cialis. After sexual stimulation, these medicines work by relaxing the blood vessels in the penis. More blood can enter the penis, which helps you get or keep an erection.

These pills should not be used by men who are taking nitrates. The combination of drugs could cause a dangerously low blood pressure. Erythromycin and some antifungal medicines can also interact with these pills. Men taking these medicines may need a different dose to prevent side effects. PDE-5 inhibitors can cause side effects such as flushing, headache, and indigestion.

Other drugs can be self-injected into the penis when an erection is desired. A possible problem with these shots is priapism (painful erections that last more than 4 hours). This requires emergency treatment. Because of this risk, the shots must be used only with a health care provider's prescription. A man will usually become erect in 3 to 5 minutes after having a shot. Erections resulting from these shots usually last as long as an hour.

If a man's level of testosterone is low, he may be prescribed hormone treatment. Testosterone is available in the form of patches or gels that are used on the skin or as monthly shots that can be given in the arm.

### **External Mechanical Devices**

There are mechanical devices that trap blood in the penis to cause an erection. They come with a vacuum chamber, a pump, connecting tubing, and elastic bands. The system requires time and dedication on the part of the couple to become comfortable with it. There are a number of such devices on the market. They may be covered by Medicare when the problem is related to blood flow and the device is prescribed by a doctor.

You insert the soft penis into the vacuum chamber tube connected to a pump by a piece of tubing. You then apply suction by using the small hand pump. Suction pulls blood into the penis, producing an erection. The blood is held in the penis by placing a tight band, similar to a rubber band, around the base of the erect penis. You should not keep the band in place longer than 30 minutes or fall asleep with it on.

Advantages of these devices include:

- Positive results increase the desire to remain sexually active.
- They may help to reestablish penile blood while the penis is becoming erect.

### **Surgery**

Men who have defects of penile arteries or veins may choose surgery to correct the defects.

### **Invasive Mechanical Devices or Implants**

These are mechanical devices actually placed inside the body.

Invasive devices are used only when:

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- There is nerve and blood vessel damage.
- There has been no improvement with mechanical devices used outside the body, hormonal replacement therapy, or medical treatment of the cause.

Treatment involves inserting a mechanical device or prosthesis into the area where the blood normally collects to stiffen the penis.

Although the overall success rate of the penile prosthesis is greater than 95%, many doctors urge couples to consider simpler, less expensive choices before surgery.

The doctor will discuss the pros and cons of each type of device and help couples select the proper one for them. The implant has rods or cylinders that can be inflated or deflated at will. Most prostheses can be inserted during a one-day surgery and require no overnight hospital stay.

Advantages of a semi-rigid or rigid implant are:

- It is less expensive than an inflatable implant.
- It is simple to insert.
- It can be inserted under local, spinal, or general anesthesia.
- It is always ready for use once it is in place.

Disadvantages of a semi-rigid or rigid implant are:

- It is always at its full size.
- It may be hard to conceal. A semi-rigid implant can be bent so it can be hidden and then brought into position when desired.

Advantages of an inflatable implant are:

- It can be easily hidden. It uses a pump tucked in the scrotum above the left testicle and a fluid reservoir behind the pubic bone. The hollow cylinders that replace the erectile tissues are connected to the reservoir and can be inflated or deflated at will. The penis returns to a resting state when the fluid is returned to the reservoir from the cylinders by reversing the flow with the pump.

Disadvantages of an inflatable implant are:

- It is more expensive.
- Inserting it requires a hospital stay of 24 to 48 hours.
- Since it is more complex, there are more ways in which the device could stop working.

### **For More Information**

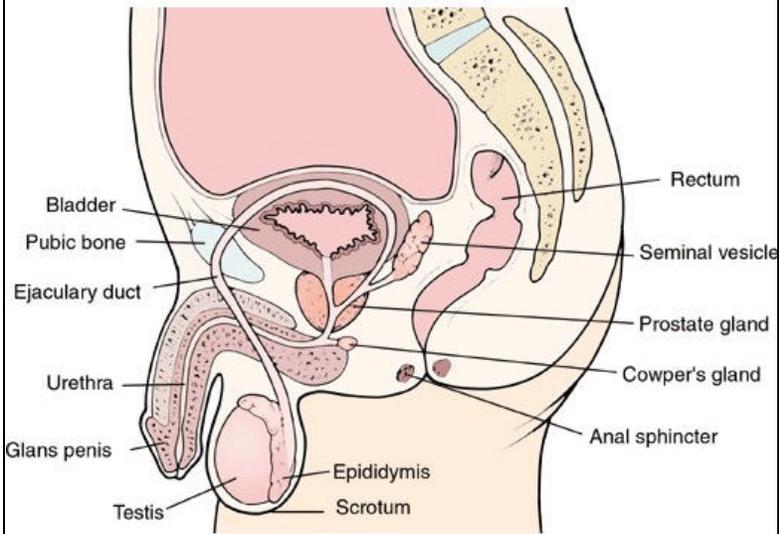
You can contact:

American Urological Association  
 Phone: 866-746-4282  
 Web site: <http://www.urologyhealth.org>

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## Male Pelvis: Side View



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