Erectile Dysfunction

Erectile dysfunction is a common, treatable medical problem that affects millions of men in the United States.

What Is Erectile Dysfunction?

Erectile dysfunction (ED), also referred to as "impotence," is a problem getting or keeping an erection hard enough for satisfactory sexual performance. Erectile dysfunction is present in 1 of 2 men older than 40 years. Other types of male sexual dysfunction can include problems with **libido** (sexual interest), orgasm, or ejaculation.

Causes of Erectile Dysfunction

Erectile dysfunction has many possible causes and can be the first symptom of an undiagnosed condition. Erections are caused by the balance of blood flow into and out of the penis. Conditions that result in changes in the penis' blood flow are common causes of ED. The 2 most common medical problems that may cause ED are atherosclerosis (hardening of the arteries) and diabetes. Obesity is also associated with both blood vessel changes and hormone changes that negatively affect erections. Another cause of ED is damage to the nerves involved in getting erections. This can happen with diseases of the nervous system (eg, multiple sclerosis, Parkinson disease) or with surgery (eg, for prostate cancer). Hormone problems, like low testosterone, and side effects of medications, like those used to treat high blood pressure, can also cause ED.

The mind and body work together when an erection occurs, so emotional or psychological factors can also cause difficulty getting or keeping an erection.

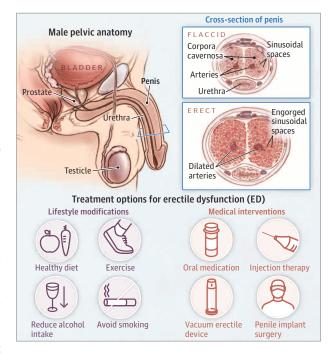
Treatments for Erectile Dysfunction

A wide range of treatment options are available and allow physicians to tailor treatment to a patient's specific goals. Erectile dysfunction should always be evaluated by a medical professional. Many products available on the Internet or in stores claim to help ED but are not proven to be safe or effective.

The first step in treating ED is often making lifestyle changes. Losing weight by dieting and exercising may be all that is needed to improve erections. You should also reduce alcohol intake and avoid smoking and illicit drug use. If ED is the result of a medication side effect, your physician may recommend alternative medications. Psychosocial therapy is effective when emotional or psychological factors contribute to ED.

Medications are commonly used to treat ED. All ED medications work by increasing the blood flow to the penis. These pills are safe and effective when used under the supervision of a physician.

If pills do not work, medications can be delivered directly into the penis. A small pellet can be placed into the hole that a man urinates through, or, alternatively, patients can be instructed how to inject



medications into the penis with a small needle. Injection therapy can treat many men who do not respond to pills.

When medications do not help, other options include a vacuum erectile device (VED) or a penile implant. A VED is a tube placed over the penis that draws blood into the penis to cause an erection. The VED is removed and the blood is kept in the penis with a band placed at the base. A penile implant is a device placed inside the penis that results in a penis hard enough for sexual activity. Penile implants are effective but require surgery to be placed.

FOR MORE INFORMATION

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- American Urological Association www.urologyhealth.org/
- National Institute of Diabetes and Digestive and Kidney Diseases www.niddk.nih.gov/health-information/health-topics/urologic -disease/erectile-dysfunction/Pages/facts.aspx
- To find this and previous JAMA Patient Pages, go to the Patient Page link on *JAMA*'s website at www.jama.com. Spanish translations are available in the supplemental content tab.

Authors: Bobby B. Najari, MD; James A. Kashanian, MD

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