

Erectile dysfunction and diabetes:

Keys to prevention and treatment

Erectile dysfunction is a common complication of **diabetes**. And left untreated, it can erode the quality of life for you and your partner. Sexual problems can increase your level of stress, frustration and discouragement; trigger depression; and even make you less likely to manage your diabetes effectively.

It doesn't have to be that way, though. You can reduce your risk of developing erectile dysfunction, prevent it from worsening and, in many cases, safely and effectively treat it — enabling you to lead a satisfying sexual life.

What is erectile dysfunction?

Erectile dysfunction is the inability to achieve or sustain an erection of sufficient rigidity for sexual intercourse. That is, your penis fails to become or stay hard enough. Erectile dysfunction, also called impotence, isn't fleeting or isolated sexual failure, which many men experience at some point in their life. Rather, it's erectile failure more than 75 percent of the time during attempted intercourse. Erectile dysfunction isn't the same as having low sexual desire or having problems with ejaculation and orgasm.

Any man can develop erectile dysfunction. But the condition has distinctive features among those with diabetes:

- * It occurs more often. As many as 80 percent of men with diabetes develop erectile dysfunction, compared to about 22 percent to 25 percent of men without diabetes. More precise percentages are difficult to estimate because many men don't talk to their doctors about the issue and because of variations in the way erectile dysfunction is defined.

- * It occurs earlier. Erectile dysfunction most frequently develops after age 65. In men with diabetes, however, it tends to occur 10 or 15 years earlier, on average. Men in their 30s and younger with diabetes have also experienced erectile dysfunction.

The longer you've had diabetes and the more severe it is, the more likely you are to develop erectile dysfunction.

What causes erectile dysfunction?

Erectile dysfunction has many causes, both physical and psychological. It may not be the result of your diabetes. Medical conditions such as heart or liver disease can cause erectile dysfunction, as can surgery or trauma. Depression, stress and excessive worry about sexual performance can all interfere with normal erectile function, whether you have diabetes or not. And certain medications, such as those used to treat high blood pressure, can also cause temporary erectile dysfunction.

But when you have diabetes, the main risk factors for developing erectile dysfunction are:

- * Nerve damage (neuropathy)
- * Blood vessel (vascular) damage
- * Poor blood sugar control

Normal male sexual physiology

A look at normal male physiology shows how these risk factors affect sexual ability.

The penis contains two cylindrical, sponge-like structures that run along its length. Those cylinders, the corpora cavernosa, make up the bulk of the erectile tissue of the penis. The corpus spongiosum is a chamber that surrounds the urethra and becomes engorged with blood during an erection. An artery runs deep through the center of each corpus cavernosum, allowing blood to flow in. Blood flows back out through a system of veins around the outside of each corpus cavernosum.

Normal sexual function requires the interplay of both the nervous and vascular systems, as well as physical, sensory and psychological events.

First, you become sexually stimulated. In response, your body releases neurotransmitters such as nitric oxide

in the penile area. These are chemical messengers, telling smooth muscle cells in the erectile tissue to relax. When they relax, the central artery and other blood vessels widen, and blood rushes into the penis.

As the corpora cavernosa fill with blood, the spongy tissue presses up against the veins, compressing them and preventing blood from flowing out of the penis. That produces an erection as the trapped blood straightens and stiffens the penis. When the stimulation ends, the muscles contract, pressure decreases and the penis becomes flaccid, returning to its nonerect size and shape.

How diabetes affects normal sexual function

In men with diabetes, normal sexual function may be disrupted for a number of reasons related to nerve and blood vessel damage.

Diabetes can cause neuropathy or damage to nerves throughout your body, including the penis. Damaged nerves can't communicate properly. So even though you might be emotionally stimulated to have intercourse, nerve damage means that information isn't relayed to the penis, and it doesn't respond.

In addition, poor blood sugar control can inhibit nitric oxide production. Lack of nitric oxide can prevent the pressure of blood in the corpora cavernosa from rising enough to close off penile veins, allowing blood to flow out of the penis instead of remaining trapped for an erection.

Blood vessels can also become narrowed or hardened (atherosclerosis) by conditions that often accompany diabetes, such as cardiovascular disease. When atherosclerosis occurs in arteries that supply the penis or pelvic area, sexual function may be disrupted.

What you can do

This sort of damage isn't inevitable. And you can take steps to help prevent erectile dysfunction from occurring or worsening.

* Talk to your doctor. Initially, you might be embarrassed to talk to your doctor about sexual health. But because erectile dysfunction is a common diabetes-related problem, your doctor won't be surprised when you mention the topic. Your doctor may ask you about it first, in fact. Talking to your doctor before a problem occurs can help you prevent or delay erectile dysfunction. Your doctor can also help determine if erectile dysfunction is the result of diabetes or another condition.

* Control your blood sugar. Good blood sugar control can prevent the nerve and blood vessel complications that lead to erectile dysfunction. If you're having trouble controlling your blood sugar, talk to your doctor about refining your treatment strategy.

* Avoid tobacco. Smoking and other tobacco use cause blood vessels to narrow, contributing to blockages that can lead to erectile dysfunction. Smoking also can decrease nitric oxide levels.

* Avoid excessive alcohol. Drinking excessive amounts of alcohol can cause erectile dysfunction by damaging blood vessels. In general, for men that means no more than two alcoholic drinks a day, and for women, no more than one.

* See a urologist. Urologists have special expertise in sexual health. Some specialize specifically in erectile dysfunction. They can help assess your condition, determine its cause, and identify safe and effective treatments.

Your urologist may recommend oral medications such as sildenafil (Viagra), tadalafil (Cialis) and vardenafil (Levitra). A small number of men have lost vision in one eye after taking these medications, causing the Food and Drug Administration to issue a warning in July 2005.

Other options include small penile suppositories that contain prostaglandins, or intra-penile injections. Your urologist may recommend surgery to implant a penile prosthesis.

A less invasive option is a vacuum tube that you place over your penis. A gentle vacuum develops as you pump air out of the tube, causing the penis to become erect. Once enlarged, you can place a ring at the base of your penis to maintain the erection.

* Get mental health treatment. Stress, anxiety and depression can cause erectile dysfunction. Even the fear of having erectile problems can make them worse. Talk to your doctor to see if these issues are playing a role in

your erectile dysfunction. Treatment with a mental health professional might help.

* Reduce your cardiovascular disease risk. Men with diabetes who also have cardiovascular disease, such as heart disease or high blood pressure, face an even greater likelihood of developing erectile dysfunction because of the added damage to blood vessels. Reducing your risk of developing cardiovascular disease, or taking the right steps to control existing conditions, can help prevent erectile dysfunction.

Knowing more about how diabetes-related complications can lead to erectile dysfunction may help you take measures to avoid the condition or prevent it from worsening. And as erectile dysfunction becomes more widely understood — thanks in part to mainstream television — it may become easier for you to discuss, just like any other medical condition.

By working closely with your diabetes care team, you can take preventive steps and learn about the best treatments for your situation so you and your partner can enjoy a healthy sexual relationship.

Copyright Panalt 2008