



Maladies of Men Only

Explaining low testosterone and erectile dysfunction

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Men and women have much in common. But let's face it: there are some obvious differences between the sexes, especially when it comes to sexual health.

Just as women have their own set of distinct health issues, there are many health problems that only concern men. Low testosterone and erectile dysfunction (impotence) are two prime examples of men's sexual health problems.

For some men, these problems can make it difficult or impossible to have sex, while others may find themselves with low self-esteem and other emotional problems.

For some men, sexual health can be a taboo subject. However, you should realize that your sexual health has an impact on your overall health and general quality of life. If you want to protect your mental and physical health and to stay active in the bedroom, it is important to know the signs of sexual health and penis problems.

Becoming more in tune with your sexual health can help you avoid worse problems down the line.

Low Testosterone

Hormones are chemicals that the body makes to control certain bodily functions. For men, testosterone is the most important sex hormone. Testosterone is key in the development of reproductive organs like the testicles and prostate as well as other male characteristics such as increased muscle mass and the growth of body hair.

In addition to shaping a man's physical features, testosterone affects sex drive and mood. The hormone is active throughout life, starting as soon as a male fetus develops inside his mother's womb.

Low testosterone - sometimes called male hypogonadism - can cause a variety of problems for men. While some of these problems are more serious than others, they all can cause difficulties for men.



Symptoms

Low testosterone can start at any age, from fetal development all the way through adulthood. The symptoms of low testosterone will depend on when the condition develops.

If a male fetus does not have enough testosterone, its internal and external sex organs may not develop correctly. Even if a child is genetically male, he could be born with:

- female sexual organs
- sexual organs that are neither clearly male nor clearly female
- underdeveloped male sexual organs

These developmental issues may make it hard to determine the sex of a child at birth.

Because testosterone plays a crucial role in male development, low testosterone can slow the onset of puberty or totally stop normal development. If a boy has low testosterone around the typical age of puberty, he may experience:

- problems developing muscle mass
- lack of deepening of the voice
- problems growing body hair
- impaired growth of the penis and testicles
- increased breast size
- excessive growth of the arms and legs in relation to the trunk of the body

If an adult male has low testosterone, he may experience problems with reproductive function as well as changes to his physical appearance. Low testosterone may affect his sex drive. It may also lead to mental and emotional changes. The signs and symptoms of low testosterone in adult men may include:

- the inability to stay erect during sexual activity (erectile dysfunction or impotence)
- diminished sex drive or libido
- lower sperm count and infertility
- increased breast size (gynecomastia)
- decreased bone mass (osteoporosis)
- decreased muscle mass
- trouble concentrating
- hot flashes
- fatigue



"Low testosterone can have some adverse effects on men's health, other than the symptomatic issues it may cause," explains Parviz Kavoussi, M.D., an expert in erectile dysfunction, sexual medicine and male infertility.

"Men who have had low testosterone for some time can be at risk for decreased bone mineral density and even osteoporosis. Studies have also shown us that correcting the testosterone level can improve the total cholesterol and the LDL (bad) cholesterol levels. A recent study from the Journal of the American College of Cardiology revealed that high serum testosterone levels predicted a reduced 5 year risk of cardiovascular events in elderly men."

Causes

There are many reasons why a man might have low testosterone. In some cases, the condition is related to aging. In others, the problem stems from damage to the testicles or from changes to parts of the brain.

As a man grows older, it is normal for his body to make less testosterone. Sometimes, however, an aging man can have levels of testosterone that are too low. In fact, an estimated 30 percent of men over the age of 75 have testosterone levels that are below normal.

Cancer, inflammatory diseases, and autoimmune diseases that affect the hypothalamus and pituitary glands (parts of the brain that tell the testicles to make testosterone) can lead to low testosterone levels.

Low testosterone can result from damage to the cells of the testicles. Because the testicles hang unprotected from the body, they are vulnerable to accidental injury. The cells of the testicles can also be damaged by inflammation of the testicles, testicular cancer, and even radiation therapy and chemotherapy used to treat cancer.

Some drugs - such as morphine and anabolic steroids - can change how the pituitary gland works, resulting in low testosterone.

Low testosterone is also caused by certain genetic diseases. These include Klinefelter syndrome - a chromosomal problem that leads to the abnormal development of the testes - and Kallmann syndrome, which leads to the abnormal development of the hypothalamus.

Men who are obese or severely overweight are at risk of low testosterone.



Treatment

The main treatment for low testosterone is hormone replacement therapy. The specific treatment will depend on the cause of low testosterone and the patient's age.

Male hormone replacement, or testosterone replacement therapy, is commonly used for low testosterone caused by testicular failure. Testosterone replacement therapy can improve many symptoms of low testosterone, including:

- improved sexual function, such as more frequent erections
- increased sex drive and energy
- better sense of well-being
- increased muscle mass
- increased bone density

If fertility (the ability to reproduce) is an issue, pituitary hormones can prompt sperm production.

Low testosterone can be caused by a pituitary tumor. In these cases, the tumor may need to be removed through surgery, drug therapy, radiation, or the replacement of other hormones.

If a boy is struggling with low testosterone, testosterone replacement therapy can stimulate puberty and other male characteristics, such as greater muscle mass, growth of body hair, and growth of the penis.

Hormone replacement therapy comes in a variety of forms. These include:

- pills
- patches
- injections
- gels
- gum and cheek tablets

Each form of testosterone replacement therapy comes with its own benefits and risks. Generally, pills are not recommended for hormone replacement in men, as low doses are not very effective and high doses can cause serious liver damage.

Muscle injections, on the other hand, are cheaper and more effective than pills.

Gels or patches are easy to use, but can cause skin irritation.



Gum tablets are also easy to use, but can cause mouth irritation and even pain in the gums. However, most of the side effects of gum tablets go away within two weeks.

"My patient's prefer either transdermal testosterone replacement or insertion of testosterone pellets under the skin," says Dr. Kavoussi. "The majority of my patients seem to prefer the pellets as it lasts 3-6 months and is relatively low maintenance with a minor procedure in the office that takes around 2 minutes through a small puncture in the skin. The gels are also a good option for men who don't mind doing a daily application but they should be careful of the risk of transference of testosterone to others with skin to skin contact."

If you suspect you have low testosterone, visit your doctor or a men's health specialist. Pinpointing the cause of your condition is key to getting proper treatment.

Erectile Dysfunction

One of the many conditions associated with low testosterone is erectile dysfunction. It is the inability to get or keep an erection. This can make it hard, if not impossible, to have sex.

There is not too much reason to worry if you have trouble getting an erection every once in a while. However, if your erectile dysfunction is a continual problem, it could lead to stress, trouble in your relationship, and issues with self-esteem.

While erectile dysfunction is not a dangerous condition on its own, it could be a sign of another health condition that needs treatment. Addressing an underlying health problem, such as heart disease or diabetes, could fix your erectile dysfunction. If that does not help you get erections, there are other drugs and treatments that may work.

Symptoms

It is fairly simple to spot the signs of erectile dysfunction. You may have erectile dysfunction if you have trouble getting an erection, trouble keeping an erection, or a reduced sex drive. In other words, if you can't get it up, you may have erectile dysfunction.

Causes

Before you can treat erectile dysfunction, you need to know what is causing it. Your erectile problems may be due to your lifestyle, physical condition, or psychological problems.



Addressing the cause of your erectile dysfunction - rather than treating the erectile dysfunction itself - could be all that it takes for you to achieve sustained erections once again.

Erectile dysfunction is usually the result of some other physical problem. Physical causes of erectile dysfunction include:

- heart disease
- hardened or narrowed blood vessels (atherosclerosis)
- high blood pressure (hypertension)
- diabetes
- obesity
- Parkinson's disease
- multiple sclerosis
- low testosterone
- development of scar tissue inside the penis (Peyronie's disease)
- certain prescription drugs
- prostate cancer treatments
- treatments for enlarged prostate
- injuries of the pelvic area or spinal cord
- surgeries of the pelvic area or spinal cord

The cause of erectile dysfunction is not always physical. For some men, the problem rests in the brain, which plays a crucial role in getting an erection. Your mental state can interfere with your ability to get and keep an erection. Psychological causes of erectile dysfunction include:

- depression
- anxiety
- stress, which can lead to relationship problems
- fatigue

Certain lifestyle choices and activities can also contribute to erectile dysfunction. These include:

- tobacco use, which can restrict blood flow to the veins and arteries that make the penis erect
- alcohol use
- drug use
- long periods of bicycling, which can compress nerves and restrict blood flow to the penis



Treatment

For some men, treating erectile dysfunction is a matter of treating an underlying condition such as obesity, diabetes, or heart disease. In other cases, men may need treatment that directly targets erectile dysfunction itself.

There is a variety of ways that erectile dysfunction can be treated, including:

- oral medications
- injections into the penis
- sex therapy
- penis pumps
- medications inserted into the penis
- surgery

Oral medications have been shown to be an effective treatment for erectile dysfunction. These medications include Viagra (sildenafil), Cialis (tadalafil), and Levitra (vardenafil).

All three of these drugs work similarly. They increase the effects of nitric oxide, which relaxes muscles in the penis, allowing for increased blood flow to the penis.

It is important to talk to your doctor before taking any drugs for erectile dysfunction, including over-the-counter remedies. Some of these medications can be dangerous, especially for men with heart disease or heart failure, a history of stroke, low blood pressure or high blood pressure, or uncontrolled diabetes.

Some types of erectile dysfunction drugs are injected with a small needle into the base or side of the penis. These include Caverject Impulse (alprostadil), Edex (alprostadil), papaverine, and phentolamine. Even though the needle used to inject these drugs is very fine, side effects can include some pain at the site of injection.

Other side effects include bleeding from the injection, prolonged erection, and formation of fibrous tissue at the site of injection.

Alprostadil can also be taken as a suppository through your urethra. In other words, you insert the tiny drug through the opening of your penis.

Erectile dysfunction is sometimes caused by low testosterone. In these cases, men may need testosterone replacement therapy.

Penis pumps are an artificial way to cause an erection. A tube is placed over the penis and then pumped to suck out the air in the tube. This pulls blood into the penis, causing an erection.

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A tension ring is then placed at the end of the penis to hold the blood in the penis to keep it firm.

Although it is rare, some men cannot get an erection because of a leaking blood vessel. These men may need surgery to fix the problem.

When erectile dysfunction occurs because of stress, anxiety, or depression, psychological counseling may be an effective treatment. Because erectile dysfunction can cause tension in a relationship, visiting a psychologist or counselor may help, even if erectile dysfunction is caused by something physical.

"In our society, for better or worse," says Dr. Kavoussi, "men have a tendency to identify themselves with erectile and sexual function and erectile dysfunction can have a significant impact on self-esteem and quality of life for the man and their partner. Although erectile dysfunction itself is not physically harmful, it can be an indicator of dangerous conditions such as heart disease, diabetes, high cholesterol, or blood vessel disease."

"The best way for a man to investigate what the root of his low testosterone and erectile dysfunction issues is would be to see a physician specialized in these areas," Dr. Kavoussi recommends. "A thorough evaluation is required, but even then, the answer may not always be clear."

While erectile dysfunction is not a life-threatening condition, it can make you feel embarrassed and self-conscious. It can also cause relationship troubles. Do not be embarrassed to talk with your doctor or a specialist about your erectile dysfunction.

These health care professionals can help you identify the cause of your problem and find a solution so that you can get back to having fun... safe and responsible fun, that is!

Contributing Expert



Parviz Kavoussi, M.D.

Parviz Kavoussi, M.D. is an expert in erectile dysfunction, sexual medicine and male infertility. He is in practice with his infertility specialist father and brother where they pride themselves in being a family that helps others start their families.