Beyond the Blue Pill

Exploring Treatment Options for Erectile Dysfunction

By Abbey Forney

Erectile dysfunction (ED), or impotence, is a surprisingly common condition among American males. By age 40, 40% of men suffer some degree of ED; by age 50, 50%; and by age 60, 60%. While these statistics may seem alarming, the most unsettling fact is that 90% of those suffering from ED do not seek treatment out of embarrassment or lack of information. But this trend is changing.

According to the National Ambulatory Medical Care Survey (NAMCS) conducted annually by the National Center for Health Statistics, Hyattsville, Maryland, for every 1,000 men in the United States, eight physician office visits were made for ED in 1985. By 1999, that rate had nearly tripled to 22.

This increase happened gradually as treatments became more widely available and discussing erectile function became accepted. One of the driving forces elevating awareness of ED was the introduction of the oral drug sildenafil citrate (Viagra®) in March 1998. NAMCS data on new drugs show an estimated 2.6 million mentions of Viagra at physician office visits in 1999, and one-third of those mentions occurred during visits for a diagnosis other than ED.

While oral medications are certainly the most widely recognized treatments for ED, they are not the only treatments and may not be effective for 30% to 40% of men.

"I see many men who come to the office seeking Viagra because they recognize the product, but it may turn out that a different medication or a different type of treatment is right for them," says LeRoy A. Jones, MD, a board-certified urologist and sexual medicine specialist with Urology San Antonio. "There is a treatment method that will work for everyone, and it's the urologist's job to educate men about their options."

Causes of ED

Understanding the cause of a man's ED plays an important role in determining

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the best treatment for his condition. ED can be traced to a physical cause, such as disease, injury, or side effects of drugs, 70% to 80% of the time. Psychological factors such as stress, anxiety, guilt, depression, low self-esteem, and fear of sexual failure cause an estimated 10% to 20% of ED cases. And many men with physical causes for ED develop some psychological reactions.

In the majority of cases, the physical cause for ED is poor vascular health. Men with risk factors such as smoking, obesity, hypertension, and diabetes are more likely to suffer from ED since the small blood vessels in the penis are partially blocked and cannot fill completely with the blood needed to produce an erection.

Disorders that cause injury to the nerves responsible for normal erections can also cause ED. Men with diseases such as multiple sclerosis and those who have undergone treatment for prostate cancer (both surgery and radiation therapy) may have nerve damage resulting in ED.

In addition, many common medicines — blood pressure drugs, antihistamines, antidepressants, tranquilizers, appetite suppressants, and cimetidine (an ulcer drug) — can produce ED as a side effect. Other possible causes include alcohol and drug abuse and hormonal abnormalities, such hypogonadism or absent/low testosterone.

The Treatment Algorithm

Most physicians suggest that treatments proceed from least to most invasive. For example, cutting back on any drugs with harmful side effects may be considered first. Or if the ED is psychologically based, experts may teach techniques that decrease the anxiety associated with intercourse.

Oral Therapy

If the physician determines that medical intervention is necessary, he may suggest that the patient first try an oral medication like Viagra, Levitra®, or Cialis®. These medicines are taken before sexual activity and work by enhancing the effects of nitric oxide, a chemical that results in smooth relaxation of the blood vessels that are responsible for normal erectile function. Men report 60% to 70% satisfaction with this type of treatment, but 30% to 40% of men are not satisfied and should consider alternative therapies.

Additionally, men who take nitrate-based drugs, such as nitroglycerin for heart problems, cannot use these types of medications because the combination can cause a sudden drop in blood pressure. They, too, should explore other treatment methods.

Other Drug Therapies

Following oral medications, the next line of treatment is injection therapy. This

Women and Erectile Dysfunction

By Tama Swan

At times, the best way to treat erectile dysfunction (ED) is for the woman to get involved. Physicians recommend women take an active rather than passive response at the onset of symptoms. Ignoring the problem or assuming he will work it out on his own is a mistake. Women should talk openly about the disorder and seek information about help and available options, things some men avoid.

Results from a study in Italy showed that more than 40% of men with ED have not spoken to their partners about their sexual dysfunctions. And when either of the partners finally struck up a conversation on ED, misunderstandings occurred. Some men find empathy humiliating and may interpret their partners' reassurance as an indicator that the sexual relationship is of little importance to them. Some key things for women to remember when communicating with their partners about ED are:

- Let your partner know that it's your problem too, not just his.
- Reinforce your partner's masculinity.
- Find out if it's an isolated incident or if it has happened before.
- Do your research and be prepared with facts.
- Encourage him to visit his physician.

Women are substantially affected by ED. Some women begin to feel rejected or think it is their fault. While it's easy to fall into this line of thinking, experts say it's an overreaction. Physiologically, ED has nothing to do with the woman. But as for ED treatment, the woman's involvement is crucial.

therapy involves the patient injecting medication directly into his penis before intercourse via a small needle. The drugs cause the blood vessels to dilate, which increases blood flow, causing an erection. "For many men, injection therapy produces a satisfying solution, but other men find that this therapy does not fit their lifestyles and will discontinue use within two years," says Dr. Jones.

Another form of drug therapy includes a system for inserting a pellet of alprostadil into the urethra. With this system, marketed as MUSE® (medicated urethral system for erections), the patient uses a prefilled applicator to deliver the pellet about an inch deep into the urethra. An erection will begin within eight to 10 minutes and may last 30 to 60 minutes. The most common side effect is a warmth or burning sensation in the urethra.

Testosterone supplements, taken either through the skin, or through injections, can reduce ED in some men with low levels of natural testosterone. Patients also have claimed that herbal remedies, including yohimbin, are effective, but the results of scientific studies to substantiate these claims have been inconsistent.

Vacuum Devices

Other treatment possibilities involve no medications at all. Vacuum devices cause erection by creating a partial vacuum, which draws blood into the penis, engorging and expanding it. These devices have three components: a plastic cylinder, into which the penis is placed; a pump, which draws air out of the cylinder; and an elastic band, which is placed around the base of the penis to maintain the erection after the cylinder is removed by preventing blood from flowing back into the body during intercourse. Vacuum devices work for almost all men, but some opt not to utilize them, citing the device's cumbersomeness in the bedroom.

Surgery

The final therapy in the algorithm for treating ED is surgery. Surgically implanted devices known as penile prostheses can restore erections in many men with ED and have a 93% patient and partner satisfaction rate.

The inflatable (verses malleable) prosthesis is the most popular type. It consists of a pump, a reservoir filled with saline solution, and cylindrical containers. The reservoir is implanted behind the bladder, the cylinders are inserted into the penis, and the pump sits under the loose skin of the scrotal sac, between the testicles.

All of these components can be placed through a single 2-inch incision made on the scrotum. To inflate the cylinders and produce an erection, the man squeezes the pump. To deflate the cylinders and return the penis to its flaccid state, the man squeezes a release valve, also located in the scrotum.

A skilled surgeon can implant the prosthesis in less than an hour during a procedure that is performed with the patient under general or spinal anesthesia. With the recent improvement of adding an antibiotic coating to the prosthesis, infection rates are less than 1% in non-diabetic patients, and mechanical failures are rare.

Inflatable prostheses were developed approximately 30 years ago by Brantley Scott, MD, at Baylor College of Medicine in Houston, but because many urologic training programs lack a prosthetic urologist to teach the implantation procedure, many physicians, as well as patients, are unaware of this treatment option.

"Most patients who have tried other treatments tell me that they appreciate the 'go anywhere, always ready' freedom that the prosthesis brings; and many say that they wish they had received their implant earlier," says Dr. Jones.

A Rare Expertise

By Abbey Forney

The insertion of penile prostheses to treat erectile dysfunction (ED) is not a rare procedure, but many patients and even physicians are unaware of the availability of this form of therapy. The lack of awareness results primarily from a shortage of urologists trained to perform the procedure. Only 15% of the nation's urologic residency programs offer instruction in prosthetics, and consequently, many urologists are not comfortable performing the procedure.

LeRoy A. Jones, MD

LeRoy A. Jones, MD, is one of the less than 1% of urologists who perform more than 25 prosthetic implants a year. In fact, Dr. Jones performs approximately 100 implants each year and is among the top three prosthetic urologists in the United States.

Dr. Jones is recognized both nationally and internationally for his expertise and routinely travels the globe lecturing and training other urologists in prosthetic surgery. He earned his medical degree at Washington University in St. Louis and completed his general surgical training at The Johns Hopkins Hospital in Baltimore. He completed his urologic training at Baylor College of Medicine in Houston, the school where Brantley Scott, MD, invented the penile prosthesis.

Before joining Urology San Antonio, Dr. Jones worked for 10 years in academic urology, most recently at the University of Texas Health Science Center in San Antonio.