

# UNDERSTANDING ERECTILE DYSFUNCTION

## A PATIENT'S GUIDE

Schedule an appointment with a  
provider today - call  
865-351-6644 or visit  
[tnurology.com](https://tnurology.com).

**Tennessee**  
**UROLOGY®**

*The most personal care for life's most personal issues.®*

**[tnurology.com](https://tnurology.com)**



**Tennessee**  
**UROLOGY®**



## WHAT IS ERECTILE DYSFUNCTION?

**Erectile Dysfunction (ED)**, is the persistent inability to maintain an erection that is firm enough or lasts long enough to complete sexual intercourse and have a satisfying sexual experience. ED can often be a sign of an underlying health issue that needs treatment, such as prostate cancer, diabetes, low testosterone, cardiovascular disease, or another contributing factor that your doctor can identify.

It is estimated that ED affects about 1 in 10 men at some point in their life. While ED is a common condition, it is not a normal part of aging.

*Did you know? Some 50 percent of men with diabetes have ED, often within 10 years of diagnosis. And, men who smoke more than one pack of cigarettes a day have a 50 percent higher chance of having ED than nonsmokers of similar age.*

## COMMON CAUSES OF ED

Erectile dysfunction is not just a part of the aging process, nor is it normal for a man to lose his erectile function as a result of getting older. In most cases, ED is caused by an underlying medical condition such as:

- Diabetes can cause damage to the nerves or blood vessels that control the flow of blood to the penis.
- Cardiovascular diseases such as atherosclerosis (hardening of the arteries), hypertension, and high cholesterol can decrease blood flow to the penis through blocked arteries or leaking veins, resulting in erectile dysfunction.
- Trauma or surgery in the prostate, bladder, colon or rectal area can damage nerves and cause ED.
- Neurological diseases such as stroke, multiple sclerosis (MS), Parkinson's disease, or spinal cord injuries can stop nerve impulses from reaching the penis.
- Medications, including some for high blood pressure, can interfere with blood flow to the penis.
- Low testosterone and hormonal imbalances can also be a factor in the development of ED.
- Obstructive sleep apnea, a condition in which breathing stops several times per night, may make erectile dysfunction more likely.

## TREATMENT OPTIONS FOR ED

Men experiencing erectile dysfunction have choices when it comes to effective treatments. There are a wide variety of treatment options available and your provider will recommend a treatment that is right for you.

**Oral Medications** – Several prescription medications are available that may improve blood flow to the penis. Combined with sexual stimulation, these medications can produce an erection.

### Advantages:

- Easy to use
- Feels natural
- No surgery or injections involved

### Disadvantages:

- Can take more than one hour to work, and may not work at all in some cases
- Produces an erection only after physical and psychological stimulation
- Costly; may not be covered by insurance
- Cannot be used more than once a day
- May not be advised by your physician if you've had a heart attack, stroke, or life-threatening heart rhythm

### Possible Side Effects:

While side effects are uncommon, they can include:

- Headache
- Upset stomach
- Feeling flushed
- Nasal congestion
- Back pain
- Vision disturbances
- Prolonged erections

When taking oral medications for ED, use only as directed by your physician. Not all men should use oral medications to treat ED, especially men who already take nitrate drugs, blood-thinning medications, have heart disease, high blood pressure, uncontrolled diabetes, or who have had a stroke.

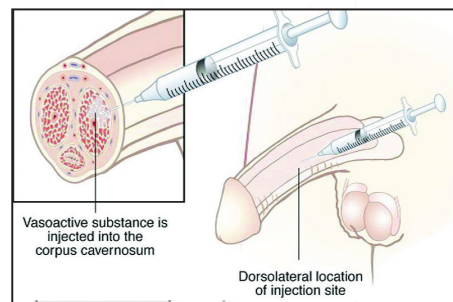
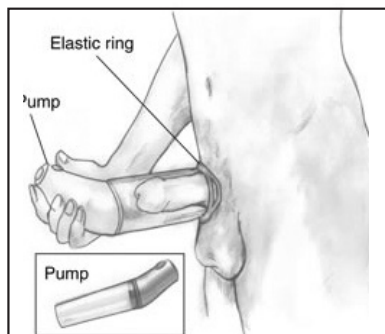
**Vacuum Erection Devices** – A plastic cylinder is placed over the penis and a pump (either manual or battery operated) creates vacuum suction within the cylinder, drawing blood into the penis to create an erection. A stretchable tension band placed at the base of the penis can help maintain the erection.

#### Advantages:

- Economical
- Can be used anytime
- Takes only five to ten minutes to apply
- No side effects
- No surgery or injections involved

#### Disadvantages and Possible Side Effects:

- May interfere with foreplay and inhibit sensuality
- Body shape may make it difficult to use this device
- Penis may be floppy during erection
- May inhibit the normal flow of ejaculation
- Lack of spontaneity



**Injection Therapy** – Injection therapy requires the use of a small needle to inject medication directly into the penis. The medicine relaxes the blood vessels and allows for increased blood flow into the penis, creating an erection. Injections are effective, fast-acting treatments because the medicine is delivered directly into the penis. The needle used is very fine, so pain from the injection site is usually minimal.

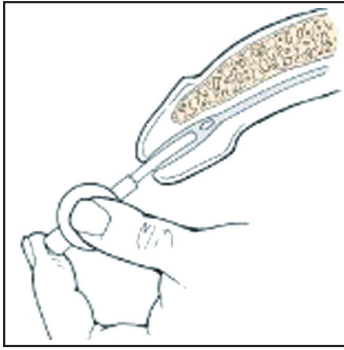
It is important that you receive these injections from a trained urologist. Penile injections not administered under the supervision of a urologist or other trained medical professional can result in serious side effects in some men. Most insurance plans will cover the cost of these injections when you are under the care of a urologist.

#### Advantages:

- Erection occurs in five to 20 minutes following injection and lasts up to one hour
- Can be used anytime
- Erection feels natural
- No surgery necessary

#### Disadvantages and Possible Side Effects:

- Can be costly if not covered by insurance
- May cause bleeding and scarring at the injection site
- Can cause painful erections that last longer than two hours
- Lack of spontaneity
- May require surgery if erection is prolonged



**Intraurethral Suppositories** – The intraurethral suppository contains a medication that works like injection therapy. A small pellet (suppository) is inserted into the urinary tube using an applicator, delivering the medication directly into the bloodstream. The medication in the suppository relaxes the blood vessels in the penis, allowing the increased blood flow into the penis to create an erection.

#### **Advantages:**

- Can be used anytime
- Produces an erection within 10 minutes, which can last 30 minutes
- No surgery or injections involved
- Uses a disposable applicator

#### **Disadvantages and Possible Side Effects:**

- Can be costly and not always covered by insurance
- Can be less effective than injection or vacuum therapy
- May cause side effects that include burning, aching or warm sensation, redness, and minor bleeding or spotting
- Lack of spontaneity

## **SURGICAL TREATMENT PENILE PROSTHESIS (IMPLANTS)**

*High satisfaction. Restored Vitality.*

When other treatments for ED have been less than successful, penile implant surgery has been called life-changing. Penile implants have been in use for more than three decades and new designs and surgical techniques utilized by our surgeons have made implant surgery even more successful for patients.

Placement of a penile implant is a minimally invasive surgical procedure with very high success and satisfaction rates among men and their partners. Most penile implant surgeries are performed as an outpatient procedure in an ambulatory surgery center, a benefit for patients.



## ABOUT PENILE PROSTHETICS

There are two types of penile implants: inflatable and semi-rigid. The inflatable implant is the most common and offers men many benefits.

### Inflatable Penile Implants

The two- and three-piece inflatable penile implant offers men a more natural erection than a semi-rigid implant. They are inflated using a pump when an erection is desired and then deflated easily and concealed in the penis. The inflatable prosthetic devices consist of a fluid-filled pair of cylinders implanted in the penis and a small pump implanted in the scrotum. Both are simple to use, completely concealed inside the body, and produce an erection that looks and feels natural.

With the two-piece implant, the man squeezes and releases the pump several times. When the fluid is pumped into the cylinders, it creates an erection that provides rigidity.

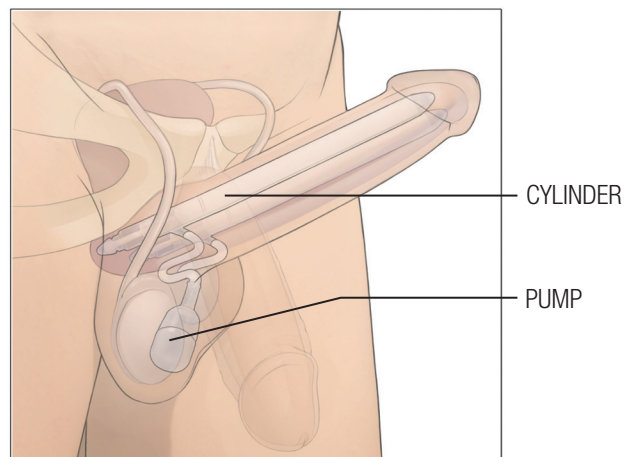
The three-piece inflatable device has an additional part — a reservoir that is implanted into the lower abdomen. When you are ready to have sex, you pump the fluid from the reservoir into the cylinders to create a rigid erection. After intercourse, you release the valve inside of the scrotum to drain the fluid back into the reservoir to return to flaccidity. The three-piece inflatable penile prosthesis creates a firmer erection than the two-piece device, but both offer men the benefit of controlling when they get an erection.

*A penile implant does not interfere with a man's ability to orgasm or ejaculate. Sexual intercourse can be as spontaneous and natural as it was before and most men say that the procedure is life-changing, restoring vitality, intimacy, and confidence.*

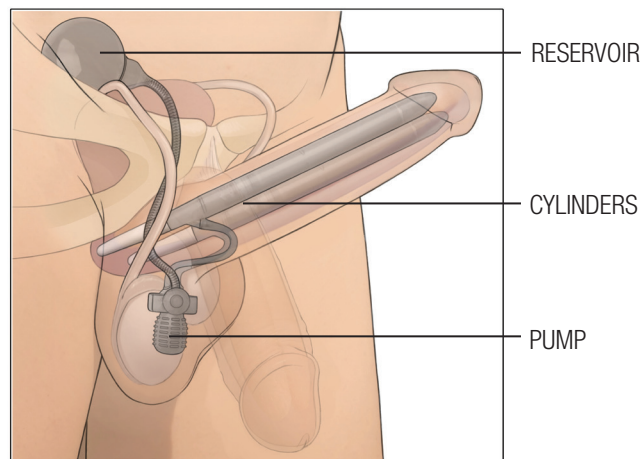
### Benefits:

- Inflated to create an erection, offering more spontaneity
- Completely concealed in the penis
- Easy to use
- When deflated, the cylinders are soft and flaccid (three-piece implant)

### Two-Piece Inflatable Prosthesis



### Three-Piece Inflatable Prosthesis



## The Semi-Rigid Implant

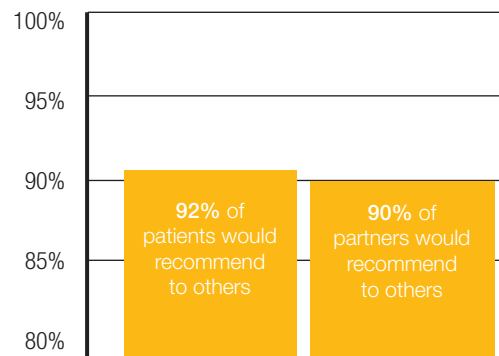
A semi-rigid penile implant does not have inflatable components or a pump, but rather bends up and down. The rod (implant) is always firm. The implant is used by bending the penis away from the body to create an erection and then bent back inward to conceal the penis.

### Benefits:

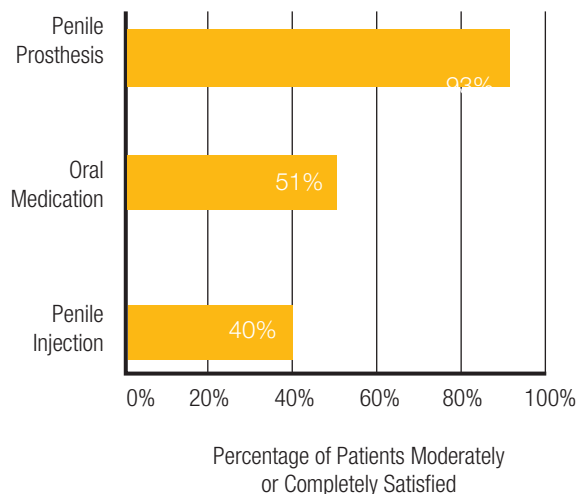
- Less complex surgical procedure for placement in the penis than inflatable devices
- Less risk of mechanical failure

*A penile implant has very high satisfaction rates among patients and their partners. In fact, 90% of partners would recommend the two-piece inflatable penile prosthetic device to other couples and the three-piece inflatable device has a 96% satisfaction rate among sexual partners.*

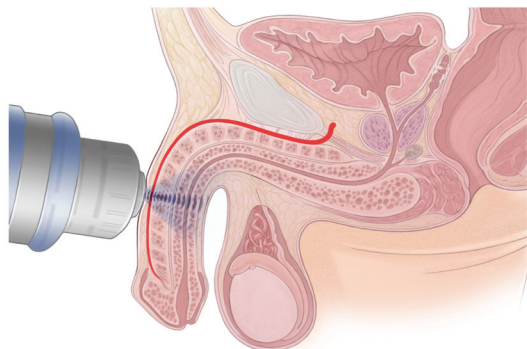
## Penile Prosthesis is Highly Recommended



## Overall Patient Satisfaction with ED Treatments



## ENERGY WAVE THERAPY



eWave® energy wave therapy is a non-invasive, safe, and effective treatment for erectile dysfunction. This procedure uses low-frequency sound waves to increase blood flow to the penis to optimize erections, sensitivity, and sexual performance. With energy wave therapy men can achieve natural, spontaneous erections without the use of ED medications, penile pumps, injections, or penile implants.

### How eWave Works

The gentle low frequency, low-intensity sound waves stimulate the erectile tissue and improve blood flow in the penis. Applying energy waves using a special treatment wand triggers revascularization, a process in which new blood vessels form.

The formation of new blood vessels and the restoration of blood flow in the penis helps restore erectile function in many men with ED. The eWave treatment typically takes 20 minutes for six sessions, once a week, over six weeks.

### Benefits of eWave Therapy

- Non-invasive
- Fast – eWave treatment takes about 20 minutes for each of the six sessions
- Effective – Improvement in erectile function may be experienced after only a few sessions

- Safe – No surgery or anesthesia is required, and men experience minimal or no side effects
- No more ED medications
- Restored vitality – Most men enjoy an active, spontaneous sex life again

### eWave Results

- Most men can get the quality, rigid erections they once experienced
- Incremental improvement in erectile function may be seen after just a few eWave sessions
- The formation of new blood vessels typically takes about three months to reach maximum effect
- Recent studies of energy wave therapy have shown that men who previously took ED medications were able to discontinue them and enjoy natural and quality erections

\*Results of eWave Therapy may vary and may not work for every man. Talk to your provider to see if eWave Therapy is right for you.

