

Treatment of Erectile Dysfunction (ED) with Self-Injection

Studies and reports have shown that most men can obtain erections by injecting a medicine into the penis when an erection is wanted. Injection therapy is effective in about 70% to 80% of men with ED. Mixtures of medicines called phentolamine, papaverine, prostaglandin and/or atropine have been injected directly into the part of the penis called the corporal cavernosa for years. This handout will discuss the new treatment and how it works. It also includes instructions on how to give the injection. These mixtures have been used since the mid-1980s. A lot of literature has been written regarding their effectiveness but compounded mixtures are not FDA approved for penile injections.

How the Treatment Works

Erections happen naturally through a process that causes special tissue in the penis to fill with blood. This causes the penis to become erect. The medicine that is injected into the penis causes more blood to flow into the penis and less blood to flow out. The medicines act to relax smooth muscle and allow an increase in penile blood flow. This results in an erection that is like a naturally occurring erection. The drug usually begins to work in 10-20 minutes, sometimes sooner. The erection may not be a full stiff erection after the injection. A more stiff erection may be obtained by stimulating the penis. In some cases, a full stiff erection may be obtained with just the injection. You should expect the reaction to last 2-3 hours. As the drug wears off and there is still partial erection, stimulating the penis may cause another stiff erection. The firmness and length of time of the erection can depend on how much of the drug is given. Your doctor may need to change the amount of drug used in the injection to meet

your individual response to the drug. The drug should not affect ejaculation or orgasm. If the injections do not work reasonably, another drug can be mixed in to make the medicine more potent. However, at any time, you may choose to consider another form of treatment for ED, such as the vacuum erection device or penile prosthesis.

Common Side Effects

The injections cause very few problems. The most common side effects include:

- Penile pain/ache
- Prolonged erection
- Facial flushing or dizziness
- Burning sensation
- Bruising at the injection site
- Scarring of the penis

Burning sensation with injection is common with alprostadil. To decrease pain or burning associated with alprostadil, you may want to take acetaminophen about 30 minutes before the injection. If too uncomfortable, contact your Urologist who may recommend another injectable medicine. If using the TriMix formula, this ingredient can be removed, which is called BiMix.

Bruising is common but does not prevent you from using the injections.

Rarely, a prolonged erection (priapism) can occur. This is more likely to occur when you first start using the medicine, or if you use too much of the medicine. If you have an erection lasting over four hours, call your health care provider or seek medical attention in your local area.

Scar tissue may develop where injections were given. If this happens, you may notice swelling and a lump within the penis. You

may also notice curvature of your erection, which is called Peyronie's disease. **Call your health care provider if this occurs.**

Injection Directions

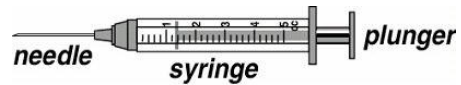
The injection can be used only once every 24 hours. Check with your pharmacist if you can inject more than three times a week. **Do not** use other prescription ED medicines within 24 hours of giving yourself an injection unless approved by your health care provider.

Instructions for Self-injection

The penis consists of two erectile cylinder-shaped bodies (the corpora cavernosa) which are on the sides of the penis. On the bottom side of the penis is the urethra which carries the urine through the penis. On the top of the penis are important nerves and blood vessels. The two erectile bodies begin in the crotch area behind the pubic bone and extend out to the head of the penis (glans). By securely holding the penis with the fingers on the bottom and thumb on the top, the corpora can be felt as a smooth, slightly firm area along the side of the penis. The injection can be given anywhere along the side of the penis into the corpora, from the base up to (but not into) the glans.

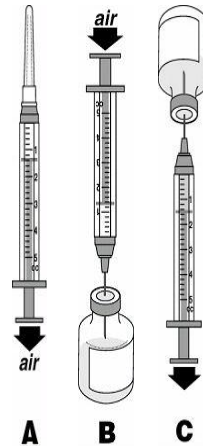
Be careful not to give the injection into the top or the bottom of the shaft. This could injure the large blood vessels, nerves, or urethra. Also try to avoid any blood vessels that can be seen under the skin.

Injections can be performed at home safely and accurately with proper care and technique. This handout will guide you through the steps to give yourself an injection. If you have any questions or concerns, please ask your health care provider.



Supplies:

- Needles and syringes
- Alcohol swabs or gauze
- Vial with the drug solution
- Sharps® container
(See Health Facts for You #4587)



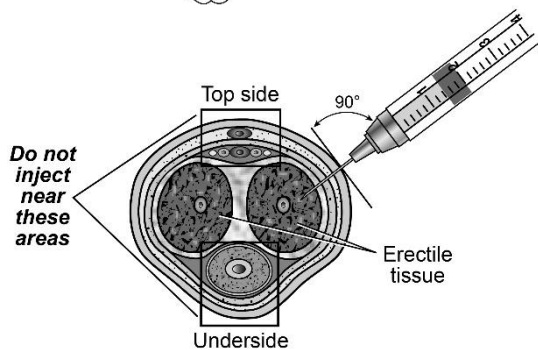
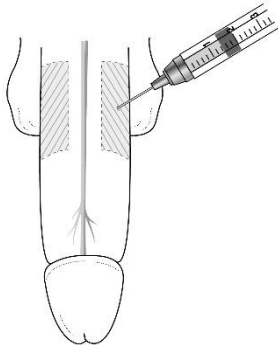
Steps

1. Wash hands well with soap and water. Collect the supplies you need and place them on a clean, dry surface.
2. Screw a needle on the syringe hub.
3. Vial: Flip off the plastic top. Use an alcohol swab and wipe that area completely using outward circular motion for 10 seconds.
4. Remove the needle cover. To get air into the syringe, pull the plunger back to the desired amount, _____ ml. See Diagram A.
5. Insert the needle straight into the vial through the rubber protective layer. Inject air into the bottle by pushing down on the plunger. See Diagram B.
6. Using one hand, turn the vial with the syringe upside down. Be sure the needle is in the bottle and below the fluid level. Pull back the plunger to the correct mark, _____ ml. See Diagram C.

7. Check for air bubbles in the syringe. Bubbles can be removed by flicking the syringe with your finger.
8. If the air bubble is at the top of the syringe, push gently on the plunger so the air goes back into the bottle. Before removing the needle, be sure you have the right amount in the syringe.

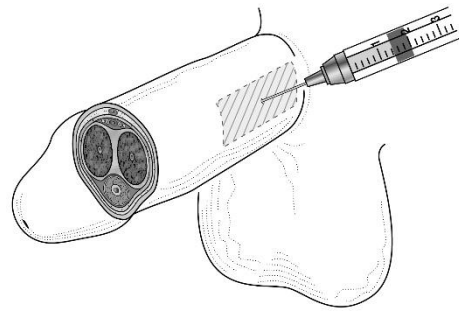
How to Inject

1. Select an injection site on the side of the penis avoiding the veins. **Do not** inject the top, bottom, or glans (see diagram)



2. Clean the injection site with an alcohol wipe. Be sure to let the alcohol dry.
3. Hold the penis with your fingers on the bottom and the thumb on top. You may rest the penis against your thigh for extra support (if necessary), but the thumb and fingers should stay on the top and bottom.

4. Hold the syringe like you would hold a pencil, at a 90-degree angle to the injection site. Quickly insert the needle all the way into the penis.
5. Inject into the side of the penis at about 9 o'clock to 11 o'clock, or 1 o'clock to 3 o'clock position.
6. Slowly inject the medicine into the penis. Then quickly pull the needle out from the site at the same angle it went in.
7. Gently apply pressure to the site for 2-3 minutes after the injection to reduce the chance of bruising. Hold pressure longer if you are taking blood thinning medicine such as aspirin or warfarin.



When to Call

- Prolonged erection (lasting more than 4 hours).
- A great deal of bruising.
- A hard, firm, swelling where injection was given.

Who to Call

If you have any questions or concerns about the treatment, please talk to your doctor or nurse.

UW Health Urology
(608) 263-4757

East Madison Hospital Urology
(608) 440-6464

1 S. Park Medical Center Urology
(608) 287-2900

After hours, weekends, and holidays, the clinic number is answered by the paging operator. Ask for the Urology doctor on call. Leave your name and phone number with the area code. The doctor will call you back.

Toll Free: **1-844-607-4800**.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 7/2022 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7442.