Treatment of Erectile Dysfunction with Self-Injection

Studies and reports have shown that most men can obtain erections by injecting a medication into the penis when an erection is desired. Injection therapy is effective in approximately 70% to 80% of men with ED. Mixtures of medications 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. While these mixtures have been used since the mid 1980s and much literature has been written regarding their efficacy, compounded mixtures are not FDA approved for penile injections. If you have any questions or concerns about the treatment, please be sure to talk with your doctor or nurse.

How does the treatment work?

Erections occur naturally through a process that causes special tissue in the penis to fill with blood. This in turn causes the penis to become erect. The medication that is injected into the penis causes more blood to flow into the penis and less blood to flow out. The medications 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 rigid erection after the injection. A more rigid erection may be obtained by stimulating the penis. In some cases, a full rigid 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 rigid erection. The rigidity and duration of the erection depends somewhat 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 satisfactorily, 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.
Are there any risks or side effects from this treatment?

The injections cause very few problems. The most common side effects include penile pain/ache, prolonged erection, facial flushing or dizziness, bruising at the injection site, and 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 very bothersome contact your Urologist who may recommend another injectable medication. If using the TriMix formula, this ingredient can be removed, which is called BiMix.

Bruising is fairly 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 medication, or if you use too much of the medication. 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.

How often can I give myself the injection?

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 medications within 24 hours of giving yourself an injection unless ok with 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 crutch 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.

Clinic Phone Numbers:

UW Health Urology 608-263-4757
UW Health at The American Center Urology 608-440-6464
UW Health One South Park Urology 608-287-2900

Supplies:

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

Steps

1. Wash hands well with soap and water. Assemble 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 thoroughly using outward circular motion for 10 seconds.
4. Remove the needle cover. To draw air into the syringe, pull the plunger back to the desired volume, ________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. Draw 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 proper volume 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. Then 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.

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.

5. Slowly inject the medication into the penis. Then quickly pull the needle out from the site at the same angle it went in.

6. 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 medication such as aspirin or warfarin.
Warning signs to call your doctor about:

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

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UW Health at The American Center Urology  608-440-6464
UW Health One South Park Urology  608-287-2900

After Hours, Nights, 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 medical record number _____________________________

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.

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