



# Erectile dysfunction (ED) and Treatment options

Treatment for erectile dysfunction can improve your sex life so that you can have a close, loving relationship with your partner.

## What is erectile dysfunction (ED)?

- Erectile dysfunction is a term used when you have a problem getting or keeping an erection.
- During an erection, the penis needs to be firm enough for you to have sexual intercourse.
- The penis is the male organ that you use for urinating and for sexual intercourse.
- It lies above the scrotum.
- It is made up of flexible tissue, muscle, nerves, and blood vessels. (See diagram: *Nerve and blood supply of the penis*)
- Your brain can also “tell” your penis to hold back blood flow to keep the penis soft (called flaccid), when it doesn’t need to be erect.
- After an orgasm and ejaculation (when sperm is let go from the body), blood leaves the penis and it again becomes flaccid.

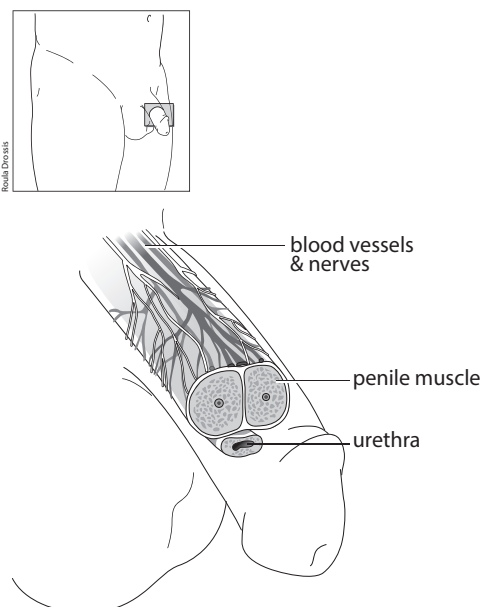
## How does erectile dysfunction (ED) affect me?

- ED is a common problem that can greatly affect your life, your partner’s life, and your relationship as a couple.
- In most cases, you can improve your sexual problems by:
  - Talking freely about them
  - Getting support for them
  - Making some changes to your lifestyle (see section: *Health and lifestyle changes*)
  - Asking your doctor for help with the problem

## Who has erectile dysfunction (ED)?

- You are more likely to have ED as you get older, but ED does not always happen as you age.
- Often health problems can cause ED - like diabetes, high blood pressure, high cholesterol, and other health issues.

### Nerve and blood supply of the penis



## What causes erectile dysfunction (ED)?

- Getting an erection is quite a complicated process for the body.
- When you are sexually aroused (“excited”), your emotions, hormones, and nerves work together to send more blood to the penis.
  - This extra blood causes an erection (called engorgement).
- Problems in different areas such as blood vessels, nerves, or hormone problems can cause ED.
  - Medications can be a cause, especially if that medication affects your mood or blood flow.
  - In some men, Injury, surgery, or radiation treatments to the pelvis can cause ED.

- Lifestyle habits, including smoking and drug or alcohol misuse, can often be a cause.
- Many men feel embarrassed or anxious about ED, which can make the problem seem worse.

## How is erectile dysfunction (ED) treated?

- It is very helpful if you and your partner work together on the problem.
- It often helps to talk over your feelings about your ED.
- It is also important to understand how your partner feels about the problem.
- You can get treatment that can suit your needs and the needs of your relationship.
- You may still be able to enjoy being physically close even if you can no longer have an erection.

## Health and lifestyle changes

- Some treatments will deal with health and lifestyle changes such as stopping smoking, controlling your cholesterol and blood pressure.

## Counselling

- Counselling can help improve your sex life if you:
  - Better understand how each of you responds to sex.
  - Talk more clearly and openly with each other.
- Your urologist, family doctor, or a psychologist trained in ED can help with this kind of counselling.

## Medications

- Sildenafil (Viagra™), tadalafil (Cialis™) and vardenafil (Levitra™) are a class of drugs called phosphodiesterase 5 (PDE5) inhibitors.
- PDE5 inhibitors help with:
  - Relaxing the blood vessels in your penis
  - Blood flowing within your penis
  - Getting an erection
- Side effects may include:
  - Headache, upset stomach, redness of the face and a “runny” or “plugged” nose.
  - The side effects do not last very long.
- These medications can be taken 1 – 2 hours before having sex.
- Tadalafil at a lower dose can be taken daily.

- PDE5 inhibitors are safe for you to use but not if you are taking certain heart medications like nitroglycerin.
- It is important to understand that PDE5 inhibitors do not work for all men.

## Male hormone replacement (testosterone)

- A few men with ED have very low levels of testosterone, the male hormone.
- With low testosterone, you may have a low interest in sex (sex drive) as well as trouble with satisfactory erections.
- If a blood test shows that your testosterone level is very low, your doctor may order hormone replacement for you.
- Testosterone replacement comes in
  - Gel which is rubbed into the skin
  - Gel which is rubbed inside the nose
  - Injections that you get every few weeks
- Testosterone replacement is only recommended when blood tests show your testosterone is low.
- Your doctor will keep an eye on:
  - Side effects from testosterone replacement
  - Any changes in your prostate
- It is comforting to know that testosterone replacement therapy does not cause prostate cancer.

## Injection into the penis

- A drug or combination of drugs can be injected into the penis using a fine needle (like the needle used for diabetes).
- Most men can learn to inject themselves safely and effectively with little pain.
- About 10 minutes after an injection, you will have an erection.
- The dose of medication can be adjusted so that the erection will last about 30-45 minutes.
- Sometimes you may have mild pain or see bruising after an injection.
- Erections that last too long (priapism) happens rarely.
  - You need immediate medical help with a priapism so that you do not permanently harm your penis.

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## Vacuum device

- A special vacuum device or pump can bring more blood into the penis.
  - The penis is put into a plastic cylinder with an elastic band at the opening of the cylinder.
  - Pumps can be electric or non-electric (manual, mechanical).
  - The pump causes a vacuum (like a vacuum cleaner) in the cylinder which pulls blood into the penis.
  - When the penis is erect, the elastic band is wrapped around the base of the penis.
  - This elastic band keeps the blood from draining back out.
  - Intercourse is now possible.
  - When the elastic band is taken off, the penis goes soft (flaccid) again.

## Surgery

- As a last resort, surgery can put rods that are flexible or inflatable into the penis to keep it stiff.

## Alternative Therapies

- There are several alternative therapies that have been studied for treatment of ED, including:
  - Low-intensity shockwave lithotripsy (also called ultrasound treatments)
  - Stem cell therapies
- These treatments are not recommended by the Canadian Urological Association.

## Bottom Line

- Treatment for ED can improve your sex life so that you can have close, loving contact with your partner.
- Your wishes and those of your partner will decide which kind of treatment would work best in your situation.

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