



Patient Care + Research + Clinical Trials

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## **Erectile Dysfunction (ED)**

Erectile dysfunction (or ED), the inability to achieve or maintain a satisfactory erection, is a common problem that can be successfully treated in the vast majority of cases.

### **Causes of ED**

Normal erectile function requires the normal supply of three things; male hormone (testosterone), blood supply to the penis and nerve supply to the penis. It is normal for an erection to subside after ejaculation.

Premature ejaculation: If your problem is that you ejaculate too quickly (“premature ejaculation”) and therefore quickly lose your erection you should talk to your family doctor about the medication paroxetine best known as a treatment for depression. The usual dose for premature ejaculation is one 20 mg tablet taken 4 hours before expected sexual activity (ie not every day). This treatment is moderately effective - if taken daily it is more effective.

Low testosterone: low testosterone level is an uncommon cause of ED. Men with low testosterone levels may notice that they are less interested in sex and/or have fewer sexual thoughts. They may notice that ejaculation takes much longer than before and that the volume of semen is much less. If you notice such symptoms, ask your family doctor for a blood test to measure your testosterone level.

The best test is “free testosterone” – if the level is low you should have two other blood tests – FSH and prolactin. Low testosterone is best treated by taking injections of testosterone into the muscle every 2 weeks or so. Testosterone may also be given as a gel, cream or tablet. Testosterone treatment should not be started without the cause of low testosterone being determined.

Poor blood supply to the penis: this a fairly common cause of ED. Men who have poor circulation in their legs or who have a history of heart attack or stroke may have an element of poor blood flow. Providing the blood supply is not severely decreased, the treatments mentioned below are often effective. Blood pressure lowering medication, particularly beta blockers, often worsen blood supply to the penis and exacerbate ED. Alternative blood-pressure lowering medication is usually available.

Damage to the nerve supply to the penis: This is the commonest cause of ED. Common causes of nerve damage (“neuropathy”) are diabetes and alcohol excess. In individuals with diabetes, improving blood glucose control and controlling blood pressure & cholesterol may help to prevent worsening of ED (and will benefit overall health).

### **Oral medications for ED**

There are three oral medications of the class “PDE5 inhibitors” that are moderately effective in treating ED caused by either poor blood flow or neuropathy. They are sildenafil (Viagra), tadalafil (Cialis) and vardenafil (Levitra). In maximal doses these three drugs are equivalent in their effects. You may ask “how likely would one of these treatments work for me”. To answer that question I would ask you to ask yourself “what is the best erection you can get on a 1 to 10 point scale? (with 10 being a very hard teenage erection and 7 being required for usual vaginal sex). On average Viagra, Cialis and Levitra increase your score by 3. Thus if your best erection is a 5, you may get an 8 which would be very satisfactory. Even if your best erection is a 4 these agents may make vaginal intercourse possible.

Sildenafil/Viagra comes in 25, 50 and 100 mg tablets. Each costs the same. You can save money therefore by breaking higher strength tablets if you find that a lower strength works for you. Viagra should be taken 60 minutes or more before sexual activity & on an empty stomach. 100 mg is the usual maximal dose. Don’t give up until you have tried it at least 3 times. Duration of action is up to 4 hours.

Vardenafil/Levitra comes in 5, 10, and 20 mg pills. 20 mg is the usual maximal dose. Higher doses may be used. It works in 30-60 minutes, lasts up to 4 hours and does not need to be taken on an empty stomach.

Tadalafil/Cialis comes in 5 and 20 mg pills. 20 mg is the usual maximal dose. Cialis works in best 60-120 minutes or so and lasts up to 36 hours and does not need to be taken on an empty stomach. The 5 mg dose is designed to be taken every day (like a vitamin), regardless of whether sexual activity is anticipated. If the daily 5 mg dose does not give optimal effects, an additional 10-20 mg can be taken hours prior to anticipated sexual activity.

These drugs are expensive. Some BCDiabetes patients have bought them online cheaply & reliably from [this source](#). They have reported that some shipments are intercepted by Customs & Excise Canada and returned - however refunds are given by the supplier.

All three agents should not be taken with nitrates or nitroglycerine (for angina) as severe low blood pressure may occur. Common side effects include stuffy nose and headache.

### **ED despite Viagra or Cialis**

Men with ED for whom Viagra/Cialis-like drugs (PDE5 inhibitors including sildenafil, tadalafil & vardenafil) are ineffective should consider two additional treatments.

#### **1) penile vacuum pump**

This treatment is effective in almost all cases. At the time of the most recent revision the best penile vacuum device on the North American market is the [Osbon ErecAid "Esteem"](#), which can be bought online for US\$249. Click [here](#) for an instructional video. For in-person advice in the Vancouver BC area, Lou Rioux, Men's Specialty Health Services, 400 - 601 West Broadway, Vancouver, [lou@mensspecialtyhealthservices.ca](mailto:lou@mensspecialtyhealthservices.ca) (ph 250-681-3719 fax 250-717-5920) is highly recommended. He not only will be happy to explain use of the device, but with your consent will provide "hands-on" assistance at no charge (don't be shy!). Local retail prices in Vancouver are approximately \$575.

ErecAid classic sells for CAD\$200 on eBay (plus \$15 for shipping + approx \$80 for GST and brokerage) if you don't have an eBay account try "buy it now" directly by phone from Med-eCenter 1-800-728-4916 or by email [auktion@allbudgetsmedical.com](mailto:auktion@allbudgetsmedical.com) - tell them you want a Osbon ErecAid Classic (retail around \$200 Canadian). - tell them you don't have an eBay account and figure out a way of paying for the device - they will ship it to you directly. If applicable ask that it be labelled as a gift in which case it should not incur GST and brokerage.

Third Party Insurance: these devices are covered by DVA and RCMP but not by Pacific Blue Cross.

## **2) intracavernosal injection (injections into the penis)**

This option is effective in most cases. It involves injection into the penis of medication (alprostadil or trimix) that cause increased blood flow into the penis. The injection is with an insulin-like syringe. Thus for individuals already taking shots of insulin for diabetes this may seem relatively straight-forward. One shot usually works for 30+ minutes. Side effects include pain at the injection site and occasionally priapism. Priapism is the development of an erection that will not subside on its own - it is painful and can occasionally lead to damage to the penis. Treatment is to go to the ER and to have a physician draw blood out of the penis with a syringe and needle. This complication is rare if care is taken in determining the optimal dose. Dr. Elliott will teach self-injection at the time of an appointment.