

# Erectile Dysfunction

Potent new therapies are the buzz **David Stubbs**



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In sexual relationships around the world, penile erections are required on an average of two to three times a week, according to urologist Dr. Jay C. Lee. Frequency of intercourse tends to diminish during the child-rearing years but undergoes a huge resurgence among empty nesters around the age of 50, says Lee, a clinical lecturer at the University of

Calgary and past chair of the Canadian Male Sexual Health Council (CMSHC).

A muscular organ fed by a rich blood supply, the penis is dependent for engorgement on the functioning of the nervous, endocrine (hormonal) and circulatory systems, as well as emotional factors.

According to the CMSHC, approximately 52% of

men ages 40 to 70 in this country — one in three sexually active adult males — face erection difficulties.

Stress, fatigue, anxiety, bad timing and medications (see “Drugs and ED,” p. 33) can play havoc with men’s sexual performance, but if the problem exists for three months or more, it’s diagnosed as erectile dysfunction (ED). Based on the World Health Organization definition, the CMSHC cites ED as “the persistent inability of a man to get or maintain an erection that is satisfactory for sexual activity.”

“For the majority of men, there is an easy solution,” says Lee, who urges those experiencing ED to seek treatment without delay. Unfortunately, men having trouble getting or keeping an erection generally opt to wait it out and avoid intimacy. “Many women blame themselves,” says Lee. In fact, it is often his partner’s desperation that compels a man to get help.

“Only an estimated 10% to 20% of men who suffer from ED will actually see their physicians,” Lee says. This is alarming since ED can be an indicator of other serious health challenges, including diabetes and heart and blood vessel disease. The Canadian Urological Association does not consider ED in and of itself to be an inevitable part of the aging process.

Consider this example from Lee’s practice. He treated a slightly overweight 50-year-old diabetic man who had hypertension — let’s call him Tom — for an

## Factoids

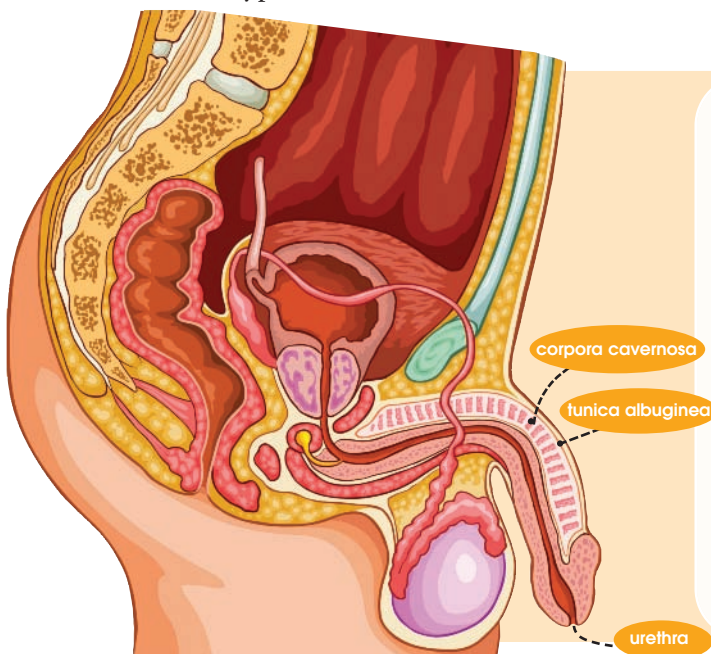
- Erectile dysfunction (ED) affects more than 150 million men worldwide.
- The number of men suffering from ED is expected to double by the year 2025.
- The worldwide market for oral ED drugs is worth more than \$3 billion.
- A topical ED drug will be launched in Europe within the next few years.

— Medtech Insight

enlarged prostate, a condition associated with higher probability of erectile dysfunction. Tom neglected to tell his general practitioner that he had not engaged in sex with his wife for the previous five years. He admitted to Lee that it was more embarrassing to bring up the subject of ED than to undergo a clinical rectal examination for prostate problems. Happily, after being prescribed a simple and safe medication to restore his erections, Tom is again sexually active.

Like Tom, many Canadian men face a consulting-room disconnect that makes early intervention less likely. According to Lee, a CMSHC survey revealed that the vast majority of MDs (90%) feel that it is up to the patient to broach the topic of ED. Male patients overwhelmingly (87%) think that the doctor should initiate discussion.

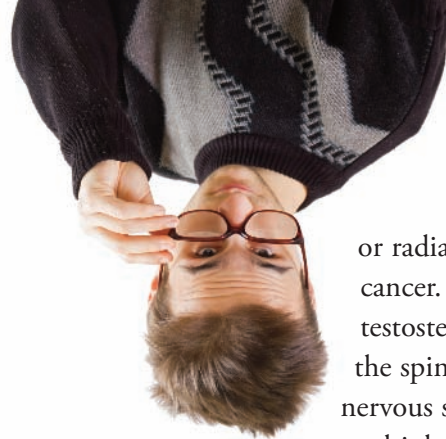
Though relationship issues, depression and drugs might precipitate ED, many cases relate to high blood pressure, arteriosclerosis, diabetes, and surgery



## Anatomy of an Erection

Along its length, the penis contains two spongy chambers known as the corpora cavernosa, which consist of smooth muscle, fibrous tissue, spaces, veins and arteries. The corpora cavernosa are surrounded by a membrane called the tunica albuginea. Running along the underside of the corpora cavernosa is the urethra, the channel through which urine and semen leave the body.

An erection begins with sensory or mental stimulation, or both. When impulses from the brain and local nerves cause the muscles of the corpora cavernosa to relax, blood flows in and fills the spaces. Creating pressure in the corpora cavernosa, the incoming blood makes the penis expand. The tunica albuginea helps trap the blood in the corpora cavernosa, thereby sustaining the erection. When muscles in the penis contract to stop the inflow of blood and the outflow channels are opened, the erection is reversed and detumescence occurs.



or radiation for prostate cancer. Other causes are low testosterone levels, injury to the spinal cord or pelvis, and nervous system pathology such as multiple sclerosis, Parkinson's

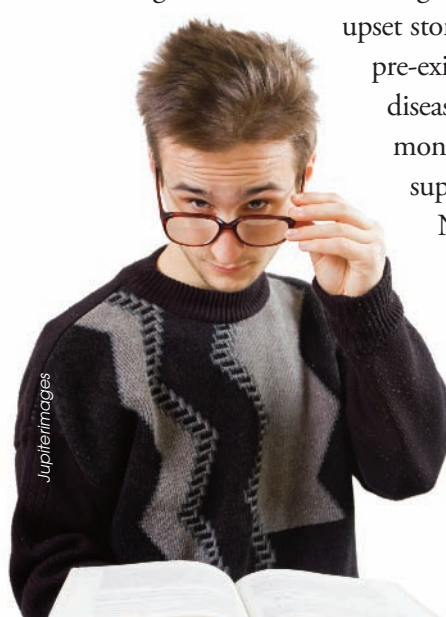
disease and complications from stroke. Whatever the cause, says Lee, "men feel better knowing there is a reason."

Tobacco is another factor. Health Canada tells us that while impotence is twice as prevalent in smokers (smoking reduces blood flow to the penis), butting out can result in full or partial recovery of erectile function. Lee advocates a heart-smart approach that addresses diet and exercise along with smoking cessation, where applicable.

Just over a decade ago, pharmacology introduced phosphodiesterase-5 (PDE-5) inhibitors, which block an enzyme in the penis. Leading to longer regional vascular dilation, this blocking allows more blood flow to the erection during sexual stimulation. These drugs are sold under the now-familiar brand names of Viagra, Cialis and Levitra. Studies show that 70% to 75% of men respond favourably to them (50% to 60% of those with diabetes). Depending on the type and dose, one pill will relax the smooth muscle cells lining the penile blood vessels for four to 36 hours. But at a typical cost of about \$15 a pill, these drugs are not cheap.

Common side effects of PDE-5 inhibitors are flushing, headaches, nasal congestion, dizziness and upset stomach. Anyone with pre-existing cardiovascular disease must be carefully monitored, and medical supervision is a must.

Nitrates — for example, nitroglycerine taken for angina — are an absolute contraindication for men on ED medication, as the



## Drugs and ED

When discussing ED with their doctors, men should be honest about their drug-taking patterns. Many prescription, over-the-counter and recreational drugs can impair a man's ability to get and maintain erections by affecting his hormones, nerves or circulation. Here's a partial list.

- Alcohol
- Amphetamines
- Anti-anxiety drugs
- Antidepressants
- Antihistamines
- Antipsychotic drugs
- Anti-seizure drugs
- Barbiturates
- Blood pressure drugs (antihypertensives, diuretics)
- Cancer drugs
- Cholesterol-lowering drugs
- Cocaine
- Heart arrhythmia drugs
- Marijuana
- Muscle relaxants
- Nicotine
- Non-steroidal anti-inflammatory drugs
- Opiates
- Parkinson's disease drugs
- Stomach acid suppressants

combination can result in a significant drop in blood pressure.

Sometimes more than a PDE-5 inhibitor is needed. Lee emphasizes that any man can get his erections back with the help of other interventions, ranging from testosterone supplementation and injections of a dilating drug to vacuum devices and inflatable or rod implants.

In some cases, however, the problem takes more than medicine and equipment to resolve — a good dose of patience, for one thing. "Sex when you are 50 is different than it was when you were 29," says Lee, and it necessitates taking more time for communication, foreplay and ejaculation. Frequency of intercourse might even return to pre-ED levels with the use of PDE-5 inhibitors. It is not true, Lee says, that these drugs render men sexually insatiable or that foreplay will in any way be diminished. He also refutes the efficacy of such herbal remedies as horny goat weed or saw palmetto.

Lee joins Health Canada in cautioning against the purchase of unregulated street drugs for ED, which are typically manufactured abroad under dubious circumstances. The consumer has no way of predetermining the consistency, safety or effectiveness of the likes of Eros Fire, Ju Wang, Firm Dose, Granite Rooster and Rize 2 The Occasion. Such products, says Lee, may contain dangerous substances such as latex paint and arsenic, and are rumoured to have a higher market return than heroin!