

Take care when prescribing new drug to treat impotence, MDs warned

Barbara Sibbald

In brief

A NEW DRUG TO TREAT IMPOTENCE that has caused shock waves in the US because of incredible patient demand will likely be available in Canada by Christmas. Barbara Sibbald reports what physicians must know before prescribing it.

En bref

UN NOUVEAU MÉDICAMENT DE TRAITEMENT DE L'IMPUISSANCE SEXUELLE, qui a provoqué une véritable onde de choc aux É.-U. tant la demande a été faramineuse, sera vraisemblablement offert au Canada d'ici Noël. Barbara Sibbald expose ce que les médecins doivent savoir avant de prescrire ce médicament.

Viagra, the impotence medication that has quickly become the best-selling prescription drug in US history, should be available in Canada by early December.

Health Canada hopes to finish its review of sildenafil in October, and if the drug is approved Pfizer Canada Inc. says it will take "about 3 to 6 weeks" to get it onto pharmacy shelves. This would make it an early Christmas present for Canadian men who experience erectile dysfunction (ED). Clinical studies indicate that sildenafil helps about 60% to 70% of men with the disorder.

Some Canadian doctors have already started prescribing the drug — their patients cross the border to have the prescriptions filled. "Patients are demanding it," explains Dr. Alvaro Morales, a professor of urology at Queen's University who headed the drug's Canadian trial. Morales himself began prescribing it May 25 after the Canadian Medical Protection Association announced it will provide coverage for prescribing physicians as long as they explain the drug's potential side effects fully.

Advertisements and the drug's label clearly state that it should not be used by men who are taking nitrates in any form, including nitroglycerin. Viagra's common side effects include temporary vision problems, headache, facial flushing and indigestion (see sidebar).

"You have to make sure you prescribe properly," says Morales, who published an article on the drug's safety in this month's issue of the *International Journal of Impotence Research*. He also chairs the Canadian Sexual Health Council, which is considering sending a letter to every Canadian doctor to warn of potential side effects.

Dr. Philip Belitsky, immediate past president of the Canadian Urological Association, says the drug can also cause problems for female partners of men who take Viagra, since many are postmenopausal and may have been sexually inactive for some time. "This new challenge can be physically distressful for the female partner," says Belitsky. However, the drug also has the potential to help them — Pfizer is conducting small-scale tests involving on several hundred women. The theory is that since women's sexual functioning also requires additional blood flow to the genital area, Viagra may be effective. No conclusive results are available yet.

Belitsky says many of his colleagues have had requests to prescribe the new drug, and several of his Halifax patients are already taking it courtesy of Internet prescriptions or American doctors. Prior to the arrival of the "Pfizer riser," treatment options were limited to penile injections and suppositories, vacuum constriction devices and surgical implants.



Features

Chroniques

Barbara Sibbald is Associate News and Features Editor at CMAJ.

CMAJ 1998;158:1755-6



Belitsky discounts the notion that Viagra is a quick fix for more complex underlying problems. "Whatever helps people has to be good," he says, "and erectile dysfunction is so distressing for both men and women."

Pfizer Canada, which is located in Kirkland, Que., is also dealing with a "steady stream of calls from physicians, pharmacists and patients," says Don Sancton, the associate director of corporate affairs.

Since going on sale in the US in mid-April, the drug has been prescribed to more than a million American men — 85% between the ages of 50 and 70 — and sales are expected to top \$400 million this year. It already outsells Prozac (fluoxetine), and like Prozac, Viagra has become a household word thanks to front-page articles and its appearance on TV shows like *NYPD Blue*.

Both Sancton and Belitsky say the publicity surrounding the new drug has had a positive side effect: it has brought ED out of the medical closet and made it part of daily conversation.

"Viagra has done more than we have as physicians to bring erectile dysfunction into the forefront," says Belitsky. "Patients are suddenly talking to doctors about it. People are talking about it around the water cooler. Erectile dysfunction has become a socially acceptable disorder." Pfizer estimates 2 to 3 million Canadians suffer from ED, yet only 5% to 10% seek treatment.

Pfizer submitted the drug to Health Canada in December 1997. Dr. Paul Roufail of Health Canada's Bureau of Pharmaceutical Assessment says it is going through standard safety and efficacy reviews, which will be completed within the targeted 300 days and likely by mid-October.

What will it cost?

A month or so later it should be on pharmacy shelves, but at what price? Pfizer isn't sure yet, but south of the border the drug wholesales for US \$7 per tablet, and the retail price can be as much as US \$14. Canadian insurance companies are already gearing up to cover the drug's cost, and by September or October Blue Cross may even begin reimbursing users for Viagra purchased in the US.

Sildenafil's impact on impotence was inadvertently discovered in England by Dr. Ian Osterloh, who was testing its efficacy in controlling angina and hypertension. He gave it to some volunteers in Sandwich, England, who reported the intriguing side effect; it has since been tested on more than 4000 men with erectile dysfunction. It is the first in a new class of drugs known as phosphodiesterase type-5 inhibitors, which increase blood flow to the penis by selectively blocking the enzyme phosphodiesterase type 5. That enzyme breaks down cyclic guanosine monophosphate (cGMP), which is needed to allow blood to flow into the penis. Patients are advised to take a 25-, 50- or 100-mg tablet about 1 hour before sexual activity. The drug only works with sexual stimulation; it is not an aphrodisiac.

Reports from the US indicate that the drug is perceived as a potency pill, not merely a cure for impotence. However, Sancton says Viagra is only indicated for the treatment of erectile dysfunction. "There's no indication it increases desire, or of the effect on men without erectile dysfunction," he says. ?

FPs can expect a barrage of questions

Family physicians will undoubtedly be barraged with questions about Viagra — if they haven't been already. Dr. Alvaro Morales, the Queen's University professor of urology who headed the drug's Canadian trials, says patients have to be warned of potential side effects and doctors need to take some precautions before prescribing it.

- The drug should only be considered only after a physical examination and medical history have confirmed a diagnosis of erectile dysfunction and determined any underlying causes, such as diabetes, that may also require treatment.
- Patients taking nitrates in any form, including nitroglycerin and long-acting nitrates commonly used for chest pain, should not take Viagra because large and sudden drops in blood pressure can occur when the drugs are combined. "Even if your patient hasn't taken nitrates in 6 months, don't pre-

scribe," warns Morales. "They may have heart palpitations during sex and decide to take nitrates."

- Patients have to be warned of common side effects. In order of prevalence these include headaches, facial flushing, dyspepsia, nasal congestion and visual problems (a bluish discoloration and difficulty differentiating blue from green). Morales says all side effects disappear within 3 to 4 hours.
- Warn patients not to take more than 1 tablet per day, and never more than 100 mg, says Morales. "Beyond 100 mg the efficacy doesn't increase but the potential side effects double."
- Because sexual intercourse increases the heart rate as well as the cardiac work load, physicians may want to assess patients' cardiovascular status prior to their resumption of sexual activity or initiation of any treatment for ED.