

What is Viagra?

Viagra is the trade name of sildenafil, an anti-impotence drug belonging to a new group of drugs known as PDE5 inhibitors. Viagra was initially developed as a treatment for angina, and its ability to increase the incidence of erections was noticed during tests.

How does it work?

Viagra works as an inhibitor, improving blood flow to the penis by stopping the breakdown of cGMP – a chemical generated by the release of nitric oxide during sexual stimulation. The smooth muscle in the penis relaxes, blood vessels dilate, allowing increased blood flow to the penis. Viagra promotes blood flow into the penis only during sexual stimulation – facilitating an erection, but not causing one.

Those whose impotence is not caused by poor blood flow may gain little from taking Viagra.

Users take the drug orally an hour before intended sexual activity. The drug is expected to last for up to four hours after initial effects begin.

Although it is not strictly an aphrodisiac Viagra can increase sexual confidence, so heightening desire.

Side effects

Side effects vary, but can include flushing and headaches, less commonly indigestion, and muscle pain caused by the drug's vasodilator properties. At higher doses visual disturbances, such as a blue haze around objects, are caused by the inhibition of a chemical similar to PDE5 in the retina, involved in turning light into sight.

A rare side effect, particularly in those with little or no penile dysfunction, is a prolonged painful erection known as priapism. This can last up to 12 hours and can damage the soft tissue in the penis.

A number of deaths have been linked to Viagra – six so far in the UK. Most are the result of users with heart trouble collapsing during sex. Therefore those with cardiovascular disease such as myocardial infarction, angina, recent stroke, bleeding disorders, and low blood pressure particularly if they are receiving medication, are advised not to take the drug. Viagra may lead to a sudden drop in blood pressure, resulting in unconsciousness or cardiac arrest.

Those with severe liver problems and hereditary degenerative retinal disorders are also advised not to take the drug.

Those with stomach ulcers, penile deformities such as angulation and Peyronies disease, and conditions that may result in priapism such as sickle-cell anaemia, multiple myeloma or leukemia, are advised to take the drug with caution.

Mixing with other drugs

Due to Viagra's action on cGMP and nitric oxide, taking it with other nitrates such as poppers (amyl or butyl nitrates) or drugs for blood pressure control such as sublingual nitroglycerin and isosorbide mononitrate, can result in a sudden fall in blood pressure or in extreme circumstances death.

There is concern that Viagra may also interact with anti-HIV drugs, particularly protease inhibitors such as Ritonavir. If not monitored this could lead to a high residual build up of Viagra in the body, which can exacerbate side effects.

Availability

Fears that the annual cost to the NHS could exceed £90 million prompted the government to ration Viagra. NHS doctors are restricted to prescribing the drug to impotent men treated for prostate cancer or prostate removal, severe pelvic injury, diabetes, renal failure, spinal chord injuries, multiple sclerosis and other single gene neurological diseases.

The drug will also be available to men suffering severe distress because of impotence, but only through hospital treatment.

Viagra has been available on private prescription since authorisation by the European Medicines Evaluation Agency in September 1998. Prior to licensing it was available from US companies on the Internet. The Medicines Control Agency has tried to stop this (as a medicine the drug can only be legally dispensed by chemists on receipt of a prescription, to individuals 18 years or over).

Viagra, or counterfeits, can be obtained illegally on the streets, in clubs and from some sex or head shops. It is available in 25mg, 50mg and 100mg tablets and retails at roughly £12 for 50mg if prescribed privately, £4.86 on the NHS and £10-£15 on the black market.

Non-medical use

Ease of administration, unobtrusiveness, apparent success rate and few obvious side effects, have meant that Viagra has found favour among recreational users such as clubbers, gay men, those experimenting sexually with the drug and men and women seeking their own medication.

It is available in clubs and bars to compliment drugs such as cocaine, ecstasy and amphetamine to prolong erection and sexual activity. Ecstasy and amphetamines can inhibit erection in some users: a proportion of these report anecdotally that Viagra can help restore their sexual activity.

A recent survey in Manchester found that three per cent of clubbers interviewed said they had used the drug recreationally, usually in combination with cannabis, cocaine, ecstasy or worryingly poppers (see mixing with other drugs).

Use by women

Viagra's physical actions are not necessarily restricted to the male genitalia. Blood flow has been shown to increase in the equivalent tissue in women, facilitating sexual arousal and possibly lubrication and orgasm. The drug's manufacturers are currently investigating the potential for women's use. At the moment doctors are advised not to prescribe to women, but some women are already experimenting with the drug.

Where to get more information

Details of clinical trials, pharmacology and effects are available from the Pfizer Viagra website on <http://www.viagra.com>

For concerns over impotency contact the Impotence Association on 0181 767 7791.