



Sildenafil (Viagra®)

General:

Sildenafil is a vasoactive medication belonging to the drug class of phosphodiesterase-5 enzyme (PDE-5) inhibitors. PDE-5 is distributed throughout the body and this medication was initially designed for the treatment of ischemic cardiovascular disease by decreasing vascular resistance, relaxing smooth muscle, and increasing blood flow. One of the initial unintended side effects of the medication was improvement in erectile dysfunction (ED) in men. The largest distribution of PDE-5 is actually in the corpus cavernosum of the penis. Prior to this accidental discovery, erectile dysfunction was felt to be a natural consequence of the aging process or due underlying psychological issues. The FDA approved Sildenafil for use in erectile dysfunction in 1998 and its popularity has exploded as it has established itself as a first line therapy for the management of erectile dysfunction.

Mechanism:

Selective inhibitor of cyclic guanosine monophosphate (cGMP)-specific phosphodiesterase type 5 (PDE-5). This action delays the breakdown of cGMP by PDE-5 thereby raising concentrations in the corpus cavernosum allowing for increased smooth muscle relaxation and blood flow.

Dosing:

25-100mg by mouth 30-60 minutes prior to anticipated sexual activity.

Contraindications/Cautions:

This medication works for erectile dysfunction by decreasing the resistance to blood flow. While the largest concentration of PDE-5 is in the corpus cavernosum it still exists all over the body as do other PDE enzymes. If you have a medical condition that is particularly sensitive to changes in blood pressure or

take medications to control blood pressure make sure your healthcare provider is aware. Specifically, if you take a class of medications known as nitrates (nitroglycerin, isosorbide mononitrate, etc.) then you should NOT use this medication. Notify your healthcare provider if you have a history of bleeding disorders, vision problems including retinitis pigmentosa, priapism, ischemic heart disease, or an abnormal heart rhythm. If you have any vision problems while taking this medication stop taking it and notify your healthcare provider. This medication will not protect you against sexually transmitted infections, including HIV. Remember, sexual intercourse has an inherent degree of aerobic stress so be honest about your cardiovascular status with your healthcare provider before taking this medication.

Adverse Reactions:

Serious Reactions: hypersensitivity reaction or anaphylaxis, ventricular arrhythmia, heart attack, stroke, severe hypotension, priapism

Common Reactions: headache, flushing, myalgia, rhinitis, rash, insomnia

Storage:

Store at room temperature between 68° and 77°F. Keep away from moisture, heat, and light. Keep out of reach of children. Do not flush unused medications down the toilet or pour down a sink or drain.