



Resources ♦ Ressources

Managing sexual dysfunction

Using sildenafil for patients with cardiovascular disease

Heart and Stroke Foundation of Canada Canadian Cardiovascular Society

Responsible, consensual sexual activity is a healthy aspect of human life. Penile erection is a normal consequence of sexual arousal and is essential to men's enjoyment of orgasm during sexual intercourse. Sexual dysfunction is common among men and increases with age.

Physicians and other health care workers are responsible for care and counseling of men with erectile dysfunction who could also have overt or undiagnosed cardiovascular disease. Systemic hypertension, atherosclerotic coronary artery disease, and congestive heart failure are common among men with erectile dysfunction. Most men with these disorders benefit from some form of therapy for their erectile dysfunction, improving quality of life without increasing cardiovascular risk. With sildenafil (Viagra), however, health care workers must be aware of the risk of adverse effects in a small proportion of patients.

Sildenafil is a phosphodiesterase 5 enzyme (PDE-5) inhibitor that decreases the breakdown of cyclic guanosine monophosphate, which is essential for normal erection. Simultaneous systemic arterial and venous vasodilation occurs with PDE-5 inhibition along with an average 8/5-mm Hg lowering of blood pressure that is not dose related. In most patients with cardiovascular disease, the systemic effects of sildenafil have no adverse consequences. Sildenafil should not be prescribed for patients using any form of nitrate therapy, however, or by patients with active myocardial ischemia who are likely to be prescribed nitrate therapy.

Patients receiving multiple concomitant antihypertensive therapy should be carefully evaluated to ensure that there is no adverse, symptomatic hypotension. Because of its vasodilating properties, sildenafil should not be administered to patients with left ventricular outflow tract obstruction or low blood volume.

Most cardiovascular patients may be treated with sildenafil with the exception of those already taking nitrate therapy in any form. If nitrate therapy is essential, other types of therapy for erectile dysfunction should be considered. ❀

