Erectile Dysfunction Predictor of Coronary Heart Disease in Men Referred for Stress Testing

Recent research results suggest that Erectile Dysfunction (ED) is associated with markers of adverse cardiovascular prognosis and is a strong, independent pretest predictor of severe coronary heart disease. It is also a valuable stratifier of high cardiovascular risk in men, especially those over age 50.

Erectile dysfunction has been demonstrated to share common risk factors with coronary artery disease that includes diabetes, hypertension, smoking, and hyperlipidemia. The prevalence of ED in cardiovascular patients is higher than in the general population; in men presenting with ED, 56% were found to have a positive stress test (stress ECG, stress Cardiolite and/or stress ventricular function study) demonstrating myocardial perfusion and functional impairment. Conversely, in men with a history of heart disease or previous myocardial infarction, the incidence of sexual dysfunction ranges from 40 – 64%.*

It has been postulated in the medical literature that penile arteries are relatively small in comparison with the coronary arteries; they may be more prone to cause ED with even comparatively small amounts of atherosclerosis. This early warning sign is also a barometer of global vascular impairment that usually precedes the onset of overt coronary artery disease. Regardless, men over the age of 50, who present with ED should be evaluated for cardiovascular disease, especially men with concomitant risk factors such as smoking, hypertension, diabetes mellitus, hypercholesterolemia and obesity.

The guidelines now available for the assessment and management of ED in the cardiovascular patient stratifies men into low, medium or high risk depending on the activity of their cardiovascular disease. A comprehensive cardiac evaluation and consultation should be performed prior to treatment for erectile dysfunction and/or resumption of sexual activity as the pharmalogical prescriptions for treating coronary artery disease should not be combined with organic nitrates (which are often given for ED).

Referral Procedures – Stop ED Medications for at least 24 hours prior to Diagnostic Testing

For patients referred for stress testing, erectile dysfunction medication should be stopped prior to stress testing. Nitrates are a very effective first line treatment for stress induced ischemia. Since recent intake of erectile dysfunction medications is an absolute contraindication to nitrates, performing stress tests on patients who have recently taken these medications will unnecessarily increase the risk of stress testing. (There is minimal risk to patients not taking such medication). For short-acting medications, such as Viagra, patients should not take them for 24 hours prior to the test. For longer acting preparations, such as Cialis, patients should be off the medication for 48 hours prior to the test.

Use the KMH Cardiology Requisition Form. Your office or your patient may call to book an appointment (905-855-1860 or 1-877-564-5227) at any of the eight KMH Cardiology & Diagnostic Centres in south-central Ontario. Patients may visit www.kmhlabs.com for the location most convenient.

References:

Link Established Between Erectile Dysfunction and Calcified Coronary Arteries; from materials provided by The Mount Sinai Hospital/Mount Sinai School of Medicine; Science Daily; July 6, 2010.

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Erectile Dysfunction and Cardiovascular Disease; Neil Baum, MD; Clinical Geriatrics, Vol. 12, Issue 8; August 2004; 21 – 23.