

## **Impotence – Heart & Blood Vessel Disease Link**

By: Dr. Fred Grossman

There is an important emerging awareness of a relationship between the predisposing risk factors for heart disease and the presence of impotence. Numerous population-based cardiovascular studies have shown this to be true. Some of these risk factors include abnormal cholesterol and lipid profiles, high blood pressure, diabetes, chronic tobacco use, obesity and family history of early heart attacks or strokes.

The factor which may be common to both conditions is called endothelial dysfunction. The lining of blood vessels which bring clean blood to organs is called endothelium. If this lining is damaged, swells, or is coated with cholesterol or “plaque”, blood will not flow through as it should thus interfering with the function of the organ. Efforts are underway to confirm that impotence, especially in younger individuals, is an early sign of endothelial dysfunction which could later lead to heart attack, stroke, or other blood vessel disorders. Erections require that blood flow rapidly to the penis where it is “trapped” by the penis, thus producing an erection. Blood vessel malfunction prevents this.

This probable association has been described in several distinguished medical journals including the Journal of the American College of Cardiology, the Journal of Urology, the Journal of American Medical Association, the American Journal of Cardiology, and the International Journal of Impotence Research. Almost all of these articles have appeared within the last two years.

This concept of a connection between endothelial and erectile dysfunction should lead to a change in the historic view of impotence as a lifestyle, recreational, psychological issue. The more modern view is that when measuring a man’s vascular health one should question the quality of his erections.

Since the blood vessels which supply the penile erectile tissue are quite small, it is likely that they could be more sensitive to vascular disorders than organs supplied by larger blood vessels such as the heart, brain kidneys, or legs. It would thus follow that impotence might very well precede the diagnosis of cardiovascular disease elsewhere by many years.

The predominant method of treatment for impotence is a class of drugs consisting of Viagra, Cialis, and Levitra. These drugs have been quite successful and effective in 60 or 70 per cent of users. It is important for patients as well as treating physicians to realize that when these remarkable drugs are needed, it may signal the need to look for a vascular cause for the problem. It would be especially important to look harder at those who do not respond as expected when using these drugs.

Appropriate screening should at least include blood pressure determination, blood tests for cholesterol and diabetes, and questions about family history of heart attack and stroke.

Research is going on now to find other good screening tests for cardiovascular disease. A more specific test of penile blood flow during erection can be done by a process known as color Doppler ultrasound. This is a simple in-office modality which takes about 15-30 minutes to perform.

There is no clear agreement regarding at what age further evaluation of impotence causes is appropriate. Certainly the younger the patient, the more likely is the chance of finding an important cause for the problem and correcting it before more damage occurs. There is also the possibility of reversing whatever harm has already been done.

Finally, when a patient asks if a “trial of a certain prescription drugs is right for me?” perhaps doctors should ask “why is this trial necessary?”

Fred Grossman, MD

A handwritten signature in cursive script, appearing to read "Fred Grossman, MD".