

Vascular Disease - Erectile Dysfunction

Vascular Disease and Erectile Dysfunction

Vascular diseases are those that affect the blood vessels. These diseases restrict blood flow to organs such as the heart, brain, and kidneys. In cases of erectile dysfunction (ED), vascular diseases restrict blood flow to the penis. Fifty to as much as 70 percent of erectile dysfunction cases are caused by vascular disease.

More about vascular disease

Restriction of blood flow can occur because of a buildup of cholesterol and other substances that may block blood vessels. It also is known that blood vessels open more widely (relax or dilate) or close down to become narrower (constrict), possibly due to signals from cells called endothelial cells that are located inside the lining of these blood vessels. These signals can result in the restriction of blood flow to certain organs even without the vessels' necessarily being clogged by any material. When endothelial function is impaired, constriction that is similar to plugged blood vessels may result. This could be one explanation why ED is so commonly associated with vascular disease.

Conditions associated with vascular disease

The following conditions are associated with vascular disease:

- * Coronary artery disease
- * Hypertension
- * Diabetes
- * Peripheral vascular disease—This disease particularly affects blood vessels that supply blood to the lower extremities

Factors in vascular disease

The following conditions make vascular disease worse and likely contribute to ED:

- * High cholesterol
- * Cigarette smoking
- * Obesity

What is venous leak?

If the veins in the penis cannot prevent blood from leaving the penis during an erection, an erection cannot be maintained. This condition is known as a venous leak. Venous leakage may occur with vascular disease, but it also can occur as a result of poor smooth muscle relaxation of the penis. Difficulty with smooth muscle relaxation of the penis can occur with diabetes or with Peyronie's Disease, a condition that results in the build-up of scar tissue of the sheath surrounding the erection tissue. Venous leak also can occur when neurological diseases or high levels of anxiety are present because these conditions can prevent adequate smooth muscle relaxation.