Why diabetes can damage your blood vessels, and how to know if you’re at risk

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GUARD YOUR HEALTH

Diabetes and vascular disease may cause complications

SVS: Why diabetes can damage your blood
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ROSEMONT, Ill., Nov. 25, 2019 – When patients meet vascular surgeon Dr. William Jordan, there is a 30 to 40 percent chance they have diabetes, whether they know it or not.

Dr. Jordan is a vascular surgeon at the Emory University School of Medicine Program, and in his profession, diabetes sends a steady stream of patients his way. That’s because untreated diabetes increases the levels of glucose, or sugar, in the blood, and high levels of glucose are dangerous for the arteries. Roughly one in four Americans with diabetes are unaware that they have the disease.

“Diabetes is a relatively silent disease,” he explained. “You don’t notice it until complications start, but then it can lead to kidney failure, peripheral artery disease, blindness and other problems so serious they can eventually kill.”

Both Type 1 and Type 2 diabetes cause high blood sugar. The sugar, also called glucose, damages the inner linings of both big and small arteries. The arteries respond by layering on plaque, a substance that fills in the arteries so that oxygen-rich blood has a hard time getting through to the eyes, kidneys, legs and feet.

That condition is called atherosclerosis, or hardening of the arteries. Anyone can have hardening of the arteries, but according to the Society for Vascular Surgery, it gets more common in older people. It can cause heart attacks, strokes and prevent oxygen from getting to the legs and feet.

When it affects the legs and feet (and sometimes arms) it is called peripheral arterial disease, also known by its initials, PAD. If PAD is not treated, it can lead to gangrene and amputation. Because of its effect on the blood vessels, high blood sugar makes PAD worse and harder to treat.

Some patients meet a vascular surgeon for the first time in the emergency room, when they need immediate treatment for vascular problems like an abdominal aortic aneurysm, or no blood flow to their feet. In life or death situations, blood sugar is not usually checked.

For non-emergency patients, an HbA1c blood test the most accurate way to determine recent blood sugar levels over the prior three months, Dr. Jordan said, and is preferred over a quick test that checks a single glucose level at one point in time.

But for these vascular patients, Dr. Jordan said, checking (HbA1c) is not currently a standard procedure.

“We surgeons are having discussions about checking this more frequently,” he said. “In my view, it should be part of a general screening.”

Those who are wondering if they might have high blood sugar or a vascular complication should talk with their primary care physician about whether they might benefit from an HbA1c glucose test and/or an evaluation by a vascular surgeon. Here are some other things to consider:

1. Excessive thirst, urination, weight loss or gain, fatigue and/or irritability are signs of diabetes.
2. Wounds, especially on the feet and ankles, that are slow to heal or don’t heal at all, are warning signs of diabetes.
3. In the U.S., diabetes is more common among native Americans, African Americans and Asian Americans than among whites. Diabetes also runs in families.
4. Smokers who have diabetes are at higher risk for vascular complications than non-smokers with diabetes. (In his practice, 70 to 80 percent of Dr. Jordan’s patients are current or former smokers.) The nicotine in cigarette smoke also damages blood vessels.

For more information, download and share the Society for Vascular Surgery patient flier on diabetes in English or