

Buerger's disease

Overview

Buerger's disease is a rare disease of the arteries and veins in the arms and legs. In Buerger's disease — also called thromboangiitis obliterans — your blood vessels become inflamed, swell and can become blocked with blood clots (thrombi).

This eventually damages or destroys skin tissues and may lead to infection and gangrene. Buerger's disease usually first shows in your hands and feet and may eventually affect larger areas of your arms and legs.

Virtually everyone diagnosed with Buerger's disease smokes cigarettes or uses other forms of tobacco, such as chewing tobacco. Quitting all forms of tobacco is the only way to stop Buerger's disease. For those who don't quit, amputation of all or part of a limb is sometimes necessary.

Symptoms

Buerger's disease symptoms include:

- Tingling or numbness in the hands or feet.
- Pale, reddish or blue-tinted hands or feet.
- Pain that may come and go in your legs and feet or in your arms and hands. This pain may occur when you use your hands or feet and eases when you stop that activity (claudication), or when you're at rest.
- Inflammation along a vein just below the skin's surface (due to a blood clot in the vein).
- Fingers and toes that turn pale when exposed to cold (Raynaud's phenomenon).
- Painful open sores on your fingers and toes.

When to see a doctor

See your doctor if you think you may have signs or symptoms of Buerger's disease.

Causes

The exact cause of Buerger's disease is unknown. While tobacco use clearly plays a role in the development of Buerger's disease, it's not clear how it does so. It's thought that chemicals in tobacco may irritate the lining of your blood vessels, causing them to swell.

Experts suspect that some people may have a genetic predisposition to the disease. It's also possible that the disease is caused by an autoimmune response in which the body's immune system mistakenly attacks healthy tissue.

Risk factors

Tobacco use

Cigarette smoking greatly increases your risk of Buerger's disease. But Buerger's disease can occur in people who use any form of tobacco, including cigars and chewing tobacco.

People who smoke hand-rolled cigarettes using raw tobacco and those who smoke more than a pack and half of cigarettes a day may have the greatest risk of Buerger's disease. The rates of Buerger's disease are highest in areas of the Mediterranean, Middle East and Asia where heavy smoking is most common.

Chronic gum disease

Long-term infection of the gums has been linked to the development of Buerger's disease, though the reason for this connection isn't yet clear.

Sex

Buerger's disease is far more common in males than in females. However, this difference may be linked to higher rates of smoking in men.

Age

The disease often first appears in people less than 45 years old.

Complications

If Buerger's disease worsens, blood flow to your arms and legs decreases. This is due to blockages that make it hard for blood to reach the tips of your fingers and toes. Tissues that don't receive blood don't get the oxygen and nutrients they need to survive.

This can cause the skin and tissue on the ends of your fingers and toes to die (gangrene). Signs and symptoms of gangrene include black or blue skin, a loss of feeling in the affected finger or toe, and a foul smell from the affected area. Gangrene is a serious condition that usually requires amputation of the affected finger or toe.

Prevention

Quit using tobacco in any form

Virtually everyone who has Buerger's disease has used tobacco in some form, most prominently cigarettes. To prevent Buerger's disease, it's important to not use tobacco.

Quitting smoking can be hard. If you're like most people who smoke, you've probably tried to quit in the past. It's never too late to try again. Talk to your doctor about strategies to help you quit.

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