

Vasospastic Disorders

General Information

Vasospastic disorders cause blood vessels in your fingers and toes to narrow when you are cold or feeling stressed. This narrowing is called a vasospasm.

When this happens, blood cannot get to the surface of your skin so it turns white and blue. When the blood flow returns, the skin turns red and throbs or tingles.

In the worse cases, blood flow loss can cause sores or tissue death.

Types

Vasospastic disorders include Raynaud's phenomenon and pernio.

☐ Primary Raynaud's phenomenon:

- This is the most common form of vasospastic disorders.
- It is not linked to or caused by any other health condition.
- Signs and symptoms usually appear in young ages.

☐ Secondary Raynaud's phenomenon:

- This is the less common form but it is often more serious than primary Raynaud's phenomenon.
- Signs and symptoms usually appear around age 40.

☐ Pernio (also called chilblains):

- This causes a red and purple skin rash, and dark spots on the fingers and hands. It also causes burning and tingling feelings.

- It most often occurs during the winter.
- Signs and symptoms usually affect middle-aged women and men.

Who Can Get Vasospasms

These disorders usually affect younger women who live in the colder climates. Family history appears to increase your risk of having Raynaud's phenomenon.

Causes

■ Primary Raynaud's phenomenon and primary pernio:

- There is no known cause.

■ Secondary Raynaud's phenomenon and secondary pernio:

- They are caused by another health condition such as:
 - autoimmune disorders (such as scleroderma, rheumatoid arthritis and lupus)
 - diseases of the arteries such as atherosclerosis (build-up of fatty deposits in blood vessels) or vasculitis (inflamed or swollen) blood vessels
 - carpal tunnel syndrome (pressure on a nerve that leads to hand pain and numbness)
 - Buerger's disease (inflamed or swollen blood vessels caused by smoking).

- They can also be caused by:
 - injuries to your hands or feet (such as broken bones or frostbite)
 - repetitive movements (such as typing, playing piano or using power tools)
 - some medicines that treat high blood pressure, migraines, and attention deficit and hyperactivity disorders; some chemotherapy; and some over-the-counter cold medicines.

Signs and Symptoms

- If you have Raynaud's phenomenon, you may have painful white, blue or red skin color changes. These changes affect your hands or feet.

Symptoms are usually triggered by cold temperature or stress.

- If you have pernio, you may have a purple or red skin rash, burning feeling and sores. These changes affect your hands or feet.

Symptoms are worse in the winter and get better in the summer.

How Your Health Care Provider Will Confirm You Have it

Your health care provider will give you an exam.

He or she may suggest you have tests such as blood tests, ultrasound, angiogram or a skin biopsy (taking a small tissue sample).

Your health care provider may suggest you have other tests or work with specialists.

Treatment

Together, you and your health care provider will find treatment that works best for you. Options may include:

- Keep your hands and feet warm. Stay away from cold conditions inside and outside.
- Avoid things that can trigger your symptoms, such as smoking and stress.

- Get regular exercise. Follow your health care provider's directions.
- Take medicines to relax your blood vessels, such as calcium channel blockers, nitrates or sildenafil.

Your health care provider will tell you about benefits, risks and side effects of any new medicine you may take.

- Take care of any other health issues you have, such as:
 - an autoimmune disease (rheumatoid arthritis, lupus or scleroderma)
 - atherosclerosis (build-up of fatty deposits in the walls of an artery)
 - vasculitis (inflamed, or swollen, blood vessels).
- Get Botox® injections in your fingers to relax the blood vessels and help you feel better if nothing else works.
- Consider nerve surgery if nothing else helps. Your health care provider will tell you about benefits, risks, side effects and recovery.

Secondary Raynaud's phenomenon and pernio may get better if the underlying health condition is treated.

You may need to make some lifestyle changes but you should be able to do most of your regular activities away from cold environments.

Whom To Call for Information

Call the Vascular Medicine Clinic at 612-863-6800 for more information.