



Raynaud's phenomenon

Introduction

Raynaud's phenomenon, also called Raynaud syndrome or disease, is a condition where blood vessels in the fingers and toes -- and sometimes in the earlobes, nose, and lips -- narrow and cause the skin to turn pale or patchy red to blue. The affected body part may feel numb and cold. It is usually triggered by cold or stress.

Episodes come and go and may last minutes or hours. Women are five times more likely to have Raynaud's than men. It usually happens between the ages of 20 - 40 in women and later in life in men. When it happens by itself, it's called primary Raynaud's. It can also happen along with another conditions, such as scleroderma, lupus, and rheumatoid arthritis. In that case, it's called secondary Raynaud's.

Although some cases may be severe, very often Raynaud's does not cause permanent damage.

Signs and Symptoms

- Changes in skin color in the fingers or toes and sometimes in the nose, legs, or earlobes. Skin may turn white, blue, then red
- Throbbing, tingling, numbness, and pain
- Rarely, deterioration of the pads on fingertips or toes
- Rarely, gangrenous ulcers near fingertips

What Causes It?

No one knows what causes primary Raynaud's. Researchers think that when people with Raynaud's get cold or feel stress -- which causes blood vessels to narrow -- their blood vessels overreact and constrict more than they do in people without Raynaud's.

Primary Raynaud's is more common in people who live in cold climates and those who also have a relative with Raynaud's.

Risk factors for secondary Raynaud's include:

- Cigarette smoking
- Age in women -- Raynaud's tends to occur between the ages of 20 - 40, although secondary Raynaud's tends to happen later
- Using vibrating tools such as chain saws and jackhammers
- Taking some medications, including some cancer drugs, narcotics, and over-the-counter cold

medications

- Having had frostbite
- Repetitive motion -- for example, typing or playing the piano
- Carpal tunnel syndrome
- Other medical conditions, such as rheumatoid arthritis, scleroderma, systemic lupus erythematosus (SLE or lupus), and carpal tunnel syndrome. If you have Raynaud's because of these conditions, it is called secondary Raynaud's and is often more severe.

What to Expect at Your Provider's Office

Your doctor may do a test where you are exposed to cold air or water to see if it brings on symptoms of Raynaud's. Your doctor may also look at the base of your fingernail under a microscope to see if there is an underlying condition.

If your doctor suspects there may be an underlying condition, he may do several blood tests, such as the antinuclear antibody test and the erythrocyte sedimentation rate (ESR), to look for connective tissue disease or other autoimmune disorders. If you have primary Raynaud's phenomenon, your health care provider may suggest trying to manage it with self-care strategies -- for example, dressing warmly, avoiding the cold, controlling stress.

Treatment Options

Many times you can help prevent symptoms of Raynaud's. One of the most important things you can do is to stop smoking. Nicotine shrinks arteries and decreases blood flow. Other ways you can help prevent symptoms include:

- Protecting yourself from cold, especially outdoors in the winter
- Guarding against cuts and other injuries to affected areas
- Avoiding caffeine
- Avoiding stress
- Exercising to increase circulation

Often, this may be enough to manage Raynaud's phenomenon.

Drug Therapies

Several types of drugs are used to treat Raynaud's phenomenon.

- Calcium-channel blockers -- may reduce the frequency and severity of attacks. These drugs include:
 - Nifedipine (Procardia)
 - Amlodipine (Norvasc)
 - Verapamil (Calan, Isoptin)
 - Diltiazem (Cardizem)
 - Felodipine (Plendil)
 - Nisoldipine (Sular)
 - Bepridil (Vascor)
- Alpha blockers -- help keep blood vessels from narrowing. Alpha blockers include:
 - Prazosin (Minipress)

- Doxazosin (Cardura)
- Vasodilators -- open up blood vessels.

Surgical Procedures

In severe cases, surgery to cut the nerves that open and close blood vessels may be done.

Complementary and Alternative Therapies

Be sure to let all your doctors know about any herbs, supplements, or alternative therapies you are using. Some complementary and alternative medicine (CAM) therapies can interfere with conventional medical therapies. Work with a doctor who is experienced in CAM therapies to find the right mix of treatments for you.

Nutrition

Avoid caffeine and alcohol, and get regular exercise. These supplements may help:

- Omega-3 fatty acids, found in fish oil (1,500 mg two to three times per day), may reduce symptoms in people with primary Raynaud's, according to one study. Fish oil did not reduce symptoms in people who had secondary Raynaud's. High doses of fish oil can increase your risk of bleeding, so ask your doctor before taking it -- especially if you already take blood-thinners such as warfarin (Coumadin), clopidogrel (Plavix), or aspirin.
- Evening primrose oil (EPO, 3 to 6 g per day) contains a different type of fatty acid that stops the body from making chemicals that narrow blood vessels. In one study, people with Raynaud's who took EPO had fewer and less severe attacks compared to those who took placebo. More research is needed, however. People who have a history of seizures should not take EPO. EPO can increase your risk of bleeding, so ask your doctor before taking it -- especially if you already take blood-thinners.
- Inositol hexaniacinate, a form of vitamin B3 or niacin, may reduce frequency of Raynaud's attacks. In studies, people took high doses of inositol hexaniacinate, which can be dangerous if not monitored by a doctor. If you want to try inositol hexaniacinate, ask your doctor to determine the right dose for you.
- Magnesium (200 mg three times per day) opens up blood vessels. Some doctors suggest taking a magnesium supplement, although there are no scientific studies to see whether it works. Take with meals and reduce dose if diarrhea occurs. Magnesium can interact with a number of medications, including antibiotics, drugs used to treat high blood pressure, and drugs used to treat osteoporosis. Ask your doctor before taking a magnesium supplement.

Herbs

Herbs are a way to strengthen and tone the body's systems. As with any therapy, you should work with your health care provider to diagnose your problem before starting any treatment. You may use herbs as dried extracts (capsules, powders, teas), glycerites (glycerine extracts), or tinctures (alcohol extracts). Unless otherwise indicated, make teas with 1 tsp. herb per cup of hot water. Steep covered 5 - 10 minutes for leaf or flowers, and 10 - 20 minutes for roots. Drink 2 - 4 cups per day. You may use tinctures alone or in combination as noted.

Tell your doctor if you are pregnant or nursing before taking any herbs.

Ginkgo (*Ginkgo biloba*) 120 - 160 mg per day -- can open up blood vessels and increase circulation in the fingers. One preliminary study found that people with Raynaud's who took 160 mg of ginkgo per day has less pain. Talk to your health care provider before taking ginkgo. Ginkgo can interact with several herbs and medications, and can increase your risk of bleeding, especially if you take blood-thinners.

Homeopathy

Homeopathy may be useful as a supportive therapy.

Acupuncture

Although no major studies have looked at acupuncture to treat Raynaud's syndrome, some people may find that acupuncture increases blood flow and decreases pain.

Mind-Body Medicine

Although there have not yet been any clinical trials, some people with Raynaud's say they have used guided imagery to reduce symptoms. More research is needed.

Following Up

Most cases of Raynaud's are not severe. Avoiding cold and stress, and not smoking, can control your symptoms.

Special Considerations

Many drugs used to treat Raynaud's phenomenon may cause birth defects, so pregnant women should not use them. Some people with Raynaud's also have depression, so talk to your doctor if you feel sad or have other symptoms of depression. Some people with Raynaud's also have migraines.

Avoid the following medications if you have Raynaud's because they can make symptoms worse. Ask your doctor about the safest way to stop taking these medications or what substitutes might work better for you. Do not stop taking prescription medications without talking to your doctor:

- Some over-the-counter cold and flu drugs -- Avoid drugs that contain pseudoephedrine, such as Actifed, Chlor-Trimeton, and Sudafed.
- Beta-blockers -- used to treat high blood pressure and heart disease. They include:
 - Acebutolol (Sectral)
 - Atenolol (Tenormin)
 - Bisoprolol (Zebeta)
 - Carteolol (Cartrol)
 - Metoprolol (Lopressor, Toprol XL)
 - Nadolol (Corgard)
 - Propranolol (Inderal)
- Birth control pills

Supporting Research

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