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Raynaud's phenomenon

Raynaud's phenomenon is a condition in which cold temperatures or strong emotions cause blood vessel spasms. This blocks blood flow to the fingers, toes, ears, and nose.

Causes

Raynaud's phenomenon can be linked to other conditions. This is called secondary Raynaud's phenomenon. Most people with the condition are over age 30.

Common causes are:

- Diseases of the arteries (such as [atherosclerosis](#) and [Buerger's disease](#))
- Drugs that cause narrowing of arteries (such as amphetamines, certain types of beta-blockers, some cancer drugs, certain drugs used for migraine headaches)
- Arthritis and autoimmune conditions (such as [scleroderma](#), [Sjogren syndrome](#), [rheumatoid arthritis](#), and [systemic lupus erythematosus](#))
- Repeated injury or usage (such as from typing, playing the piano, or heavy use of hand tools)
- Smoking
- Frostbite
- [Thoracic outlet syndrome](#)

Raynaud's phenomenon can also occur without another cause. This is called primary Raynaud's phenomenon. It most often begins in people younger than age 30.

Symptoms



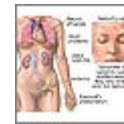
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Strong emotions or exposure to the cold bring on the changes.

- First, the fingers, toes, ears, or nose to become white, then turn blue.
- When blood flow returns, the area becomes red and then later returns to normal color.
- The attacks may last from minutes to hours.

People with primary Raynaud's phenomenon have problems in the same fingers on both sides. Most people do not have much pain.

People with Raynaud's phenomenon that is due to other medical conditions are more likely to have pain or tingling in the fingers. The pain is rarely severe. Ulcers may form on the affected fingers if the attacks are very bad.

Exams and Tests

Your health care provider can often detect the condition by doing a physical exam and asking you questions.

Tests that may be done to confirm the diagnosis include:

- [Vascular ultrasound](#)
- Cold stimulation test for Raynaud's phenomenon

Blood tests may be done to diagnose arthritic and autoimmune conditions that may cause Raynaud's phenomenon.

Treatment

Taking these steps may help control Raynaud's phenomenon:

- Stop smoking. Smoking causes blood vessels to narrow even more.
- Avoid caffeine.
- Avoid taking medicines that cause blood vessels to tighten or spasm.
- Keep the body warm. Avoid exposure to cold in any form. Wear mittens or gloves outdoors and when handling ice or frozen food. Avoid getting chilled, which may happen after any active recreational sport.
- Wear comfortable, roomy shoes and wool socks. When outside, always wear shoes.

Your health care provider may prescribe medicines to relax the walls of the blood vessels. These include topical nitroglycerin cream that you rub on your skin, calcium channel blockers, sildenafil (Viagra), and ACE inhibitors.

It is vital to treat the condition causing Raynaud's phenomenon.

Outlook (Prognosis)

The outcome varies. It depends on the cause of the problem and how bad it is.

Possible Complications

- **Gangrene** or **skin ulcers** may occur if an artery becomes completely blocked. This problem is more likely in people who also have arthritis or autoimmune conditions.
- Fingers may become thin and tapered with smooth shiny skin and nails that grow slowly. This due to the poor blood flow to the areas.

When to Contact a Medical Professional

Call your health care provider if:

- You have a history of Raynaud's phenomenon and the affected body part (arm, hand, leg, foot, or other part) becomes infected or develops a sore.
- Your fingers change color and you do not know the cause.
- Your fingers or toes turn black or the skin breaks.
- You have a sore on the skin of your feet or hands which does not heal.
- You have a fever, swollen or painful joints, or skin rashes.

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