

Pseudogout

— Comprehensive overview covers symptoms, treatment, prevention of this disease that mimics gout.

Definition

Pseudogout is a form of arthritis characterized by sudden, painful swelling in one or more of your joints. These episodes can last for days or weeks. Pseudogout typically occurs in older adults and most commonly affects your knee.

Pseudogout is named for its similarity to gout. Like gout, pseudogout causes sudden, severe pain in a joint, triggered by crystals in the joint lining. But unlike gout, which usually affects your big toe joint, pseudogout usually affects the large joints of your extremities. And pseudogout is caused by a different type of crystal. It isn't clear why crystals form in your joints and cause pseudogout. Although you can't get rid of the crystals, there are treatments to help you relieve the pain and reduce the inflammation of pseudogout.

Symptoms

Pseudogout most commonly affects your knees. Other joints that may be involved include your ankles, hands, wrists, elbows and shoulders.

If you have pseudogout, you might experience:

- Swelling of the affected joint or joints
- Warmth
- Severe joint pain

Some people experience recurring pseudogout attacks.

Causes

Pseudogout occurs when calcium pyrophosphate dihydrate (CPPD) crystals collect in the lining of your joint (synovium). The crystals form in the cartilage in and around your joints. It isn't clear why this occurs. Once formed, CPPD crystals migrate to the synovium and cause inflammation, which leads to the signs and symptoms of pseudogout. Nearly half of all people 90 and older have CPPD crystals in their joints, though most don't experience signs and symptoms of pseudogout. Why some people with joint crystals experience pseudogout and others don't isn't known.

Pseudogout is a common term for a condition called calcium pyrophosphate deposition disease. In actuality, pseudogout is just one feature of this larger disease. Calcium pyrophosphate deposition disease can also cause calcification of joint cartilage (chondrocalcinosis) and joint degeneration, though you won't necessarily experience all of these manifestations.

Risk factors

Several factors are known to increase your risk of developing CPPD crystals that can increase your risk of pseudogout, including:

- **Older age.** Older adults are more likely to experience pseudogout because CPPD crystals are more commonly found in the joints of older people.
- **Joint trauma.** Trauma to a joint, such as a serious injury or a joint replacement surgery, increases your risk of developing CPPD crystals in your joints.
- **Genetic disorder.** Families can pass predisposition to CPPD crystals through their genes. People with familial chondrocalcinosis, the name for the inherited condition, tend to develop signs and symptoms of CPPD crystal disease at younger ages.
- **Excess iron stored in your body (hemochromatosis).** This inherited disorder causes your body to store excess iron in your organs and the tissues around your joints. It's believed the iron in your joints leads to the development of CPPD crystals.

When to seek medical advice

Make an appointment with your doctor if you experience sudden, intense joint pain and swelling.

Tests and diagnosis

Pseudogout signs and symptoms mimic those of gout, so your doctor may first suspect gout. Tests can rule out gout as a cause of your signs and symptoms. To determine whether pseudogout is causing your pain, your doctor may have you undergo these tests:

- **Analysis of joint fluid.** Your doctor inserts a needle into your joint to extract a small sample of joint fluid for analysis with a microscope. He or she looks for CPPD crystals in the fluid.
- **X-rays.** X-rays of your knee can reveal other conditions caused by CPPD crystals, such as crystal deposits in the joint cartilage (chondrocalcinosis) and joint damage.

Your doctor may want to rule out other causes of joint pain and inflammation, such as infection, gout, injury and rheumatoid arthritis.

Complications

The CPPD crystal deposits that cause pseudogout can also lead to joint damage. Bones in the affected joint or joints can develop cysts, bone spurs and cartilage loss. Further damage can lead to fractures. Joint damage associated with CPPD crystals sometimes mimics the signs and symptoms of osteoarthritis or rheumatoid arthritis.

Treatments and drugs

Pseudogout treatment aims to reduce your pain and swelling. No treatments can rid your joints of the CPPD crystals that lead to pseudogout.

Treatments to relieve the pain and inflammation of pseudogout include:

- **Nonsteroidal anti-inflammatory drugs (NSAIDs)** such as ibuprofen (Advil, Motrin, others), naproxen (Aleve) and indomethacin (Indocin). NSAIDs can cause stomach bleeding and decreased kidney function, especially in older adults, so discuss these risks with your doctor.
- **Colchicine.** This medication reduces inflammation in people with gout, but it may also be useful in people with pseudogout who can't take NSAIDs. Side effects include stomach pain, nausea, diarrhea and vomiting. In rare cases, bleeding can occur.
- **Joint aspiration and injection.** To relieve pain and pressure in an affected joint, your doctor inserts a needle and removes some of the joint fluid. Then he or she injects a corticosteroid to decrease inflammation and an anesthetic to temporarily numb your joint.
- **Rest.** Keeping your affected joints still in addition to taking medications may relieve pain and swelling. Your doctor may recommend limiting your activity for a short time.

If your pseudogout is caused by joint trauma or a disease such as hemochromatosis, you may find relief when those conditions are treated first.

Prevention

If you experience repeated pseudogout attacks, you and your doctor may consider medication that may prevent attacks from occurring. Low doses of colchicine, a drug commonly used to prevent and treat gout, may reduce the number of pseudogout attacks you experience. Side effects such as stomach problems can occur in people taking colchicine. Discuss the benefits and risks of colchicine with your doctor.