

What is it?



Calcium pyrophosphate deposition disorder (CPPD) is a form of arthritis. It is caused by a build-up of calcium pyrophosphate crystals in and around the joints and tendons. These crystals can be found in the knees, wrists, pelvis, elbows, shoulders, knuckles and other joints. We don't know why these crystals form. As far as we know, taking calcium supplements does not cause CPPD or make it worse.



CPPD is like a chameleon

CPPD can disguise itself to look like a different disease in different people. This can make it difficult to diagnose.

CPPD can look like gout. For this reason, CPPD is sometimes known as pseudogout. CPPD can look like osteoarthritis (OA). Calcium pyrophosphate crystals can build up in joints that are typically affected by OA, such as the knees or other joints not typically affected by OA. When CPPD affects joints in the hands (knuckles) it can be mistaken for rheumatoid arthritis (RA).

What is it going to do to me?



The symptoms of CPPD depend on the arthritic disease it mimics.

The most common form of CPPD is calcification of tendons and joints. This can cause inflammation. Calcified structures are often found in the wrists, shoulders, knees, pelvis, and feet. This can usually be seen with a routine X-ray of the affected joint.

Another form of CPPD is pseudogout. The calcium pyrophosphate crystals form inside the joint. The immune system realizes these crystals are not normal and mounts an attack. The result is a hot, intensely painful, red, swollen joint. It may seem like the joint is infected or that it is an attack of gout. But if calcium pyrophosphate crystals are present, it's CPPD.

CPPD is often found in and around joints typically affected by osteoarthritis (OA). This is very common in the knees. CPPD should be considered when osteoarthritic changes are seen in joints not usually affected by OA such as the shoulders or elbows.

When CPPD mimics rheumatoid arthritis (RA) it causes swelling of the knuckle joints where the fingers attach to the hand. Symptoms include stiff, swollen hands. The X-rays don't show changes typical for rheumatoid arthritis – they look more like osteoarthritis.

Visit RheumInfo.com



RheumInfo.com is a free educational website where you can learn more about CPPD and treatments for the disease. The website is operated by Dr. Andy Thompson, a rheumatologist.

What can I do about it?



The first thing is don't panic. Take a deep breath. Although you might have been diagnosed with CPPD, you are not alone. Luckily, there are effective treatments available.

You should see your family doctor if you think you have CPPD. It can be a difficult disease to diagnose. Your doctor might refer you to a rheumatologist – a specialist who is an expert in treating arthritis.

Your doctor will need to tailor your therapy to your specific needs. Cortisone injections can be very effective for people with symptoms related to pseudogout, CPPD associated with OA, or CPPD causing inflammation in the tendons. This treatment can reduce pain and swelling.

Regular use of low-dose oral prednisone can be helpful in managing attacks of pseudogout in some people. Attacks of pseudogout can sometimes be prevented with a medicine called colchicine. This is the same medication taken by people who have gout.

Non-Steroidal Anti-Inflammatory Drugs or NSAIDs are medications that reduce inflammation. They also help to reduce symptoms such as pain. NSAIDs can be used for people with pseudogout or CPPD associated with OA. NSAIDs are an important treatment option in cases where joints can't be easily injected with cortisone.

Non-prescription analgesic medications such as acetaminophen (Tylenol) can be used to control pain. For more severe pain, stronger medicines called opioids may be used.

Here are some other recommendations on what you should do:

- **Learn as much as you can about the disease**
- **Attend your medical appointments regularly**
- **Learn about joint protection from a physiotherapist or occupational therapist**
- **Learn about the medications used to treat CPPD**