

Chronic recurrent multifocal osteomyelitis (CRMO)

What is CRMO?

Chronic recurrent multifocal osteomyelitis (CRMO) is a disease affecting the bones. Inflammation is normally one of the body's protective responses to infection or injury, but in diseases such as CRMO, uncontrolled inflammation can cause damage. In CRMO, inflammation targets the bone and can occur throughout the body. CRMO is occasionally also referred to as chronic non-infectious osteomyelitis. CRMO is a chronic disease, which means that it can last for many years. It can recur (sometimes called a flare) and may involve one or many bones (multifocal).

What causes CRMO?

The cause of CRMO is not known. CRMO is sometimes seen in children with other diseases such as bowel disease (e.g. Crohn's disease), psoriasis and severe acne. Some doctors think that a combination of genetic factors (something you are born with) and environmental triggers (such as infections) cause CRMO.

What are the symptoms of CRMO?

Your child may have pain and swelling in a bone or joint, and may limp depending on the body part affected. The most commonly affected sites include: the bones around the knee, ankle, wrist, back and collar bone. Your child may have fever and feel generally unwell.

How is CRMO diagnosed?

There is no specific test to confirm the diagnosis of CRMO. The diagnosis is usually made based on symptoms and a physical examination as well as tests. It is important that other diseases are ruled out before a diagnosis of CRMO is made. Tests may include: blood tests, x-rays, bone scan, CT (computerised tomography) or MRI (magnetic resonance imaging) and sometimes a bone biopsy. Bone scan, MRI and CT are special types of tests that provide your child's doctor with further information about the areas of inflammation. Bone biopsy is when a small piece of bone is taken for examination under a microscope. This is done under a general anaesthetic.

How is CRMO treated?

The aim of treatment is to control inflammation and for your child to be free of symptoms. There are a number of medications your child's doctor may prescribe depending on the severity of the disease. The most commonly used medicines for CRMO are non steroidal anti-inflammatory drugs (NSAIDs). Sometimes other medicines are required. These may include: steroids by mouth or by infusion (into veins through a drip) in hospital, bisphosphonates and immunosuppressive medicines. As well as medications, your child may need therapy with other health professionals such as the clinical nurse specialist or physiotherapist.

How can I help my child with CRMO?

Follow up: The most important aspect of managing your child's CRMO is remembering to take their medicines and to attend clinic for regular checkups.

Exercise: Exercise improves muscle, joint and bone strength.

Diet: There are no specific recommendations regarding diet for children with CRMO.

Vaccinations: It is important to check with your child's doctor or nurse before your child receives vaccinations. If your child is taking immunosuppressive medicines or steroids, live vaccines should be avoided.

Complementary and alternative medicines: At present, there is no evidence to support the use of complementary or alternative medicines in CRMO. It is important that your doctor is aware of any other medicines you are taking.

Living with CRMO

CRMO can come and go over many years. When the disease is active, CRMO can limit your child's usual activities. Your child may not feel like going out with friends or going to school. It is helpful to let the school know about your child's illness. They may be able to offer support to make things easier.

What is the outlook for my child?

Your child's rheumatology team aims to help your child feel better so that they can continue their everyday activities. CRMO often improves or resolves with age.

Where can I find more information?

Useful websites:

- www.printo.it
- www.bonetumor.org/tumours/pages/CRMO
- www.aboutkidshealth.com

Key points

- CRMO causes bone or joint pain
- CRMO can recur and affect multiple bones
- The symptoms of CRMO can be treated

CONTACT YOUR LOCAL ARTHRITIS OFFICE FOR MORE INFORMATION SHEETS ON ARTHRITIS.

This sheet was produced in association with the Australian Paediatric Rheumatology Group