Chronic recurrent multifocal osteomyelitis (CRMO), or chronic nonbacterial osteomyelitis (CNO), is an auto-inflammatory disorder that causes bone pain due to inflammation in the bones not caused by infection.

Chronic recurrent multifocal osteomyelitis (CRMO) can take months to years to diagnose. CRMO was previously thought to be rare, occurring in about 0.4 out of 100,000 people per year. As recognition of CRMO is increasing, it appears to be more common than that. In fact, CRMO may be nearly as common as bone infections. The average age that CRMO starts is 9 to 10 years. More girls are affected than boys.

Bone pain is the most common symptom. There is usually tenderness at the affected site (it hurts to be pushed on). The pain can cause the person to avoid using the affected body part. Some people with CRMO can develop arthritis (joint swelling). Fatigue is common during active disease. A small fraction of people with CRMO have a genetic component. Some families have more than one person with CRMO.

CRMO is monitored by following symptoms and imaging studies. MRI is the best way to assess resolution of active bone lesions and/or detect new lesions.

Treatment of CRMO depends on how severe it is and which bones it affects. Treatment usually starts with NSAID medications (ibuprofen, naproxen, meloxicam), but some patients need stronger medicines, including methotrexate, biologics (etanercept, adalimumab, infliximab, anakinra) and bisphosphonates (pamidronate, zoledronic acid). People taking methotrexate and biologic medications are at a higher risk of infection and should be evaluated by a doctor if they develop fever or symptoms of infection. People must be screened for tuberculosis (TB) prior to starting biologic medications.

For people with CRMO, life often involves taking medications and having follow-up visits with a rheumatologist. Depending on which bones are affected, some people need to limit activities to prevent serious injury or bone damage. People with spine involvement are at risk for serious injury if spine fracture occurs. People with CRMO should discuss activity restrictions with their doctor.

It is possible for CRMO to go away either for a short period of time or permanently in some people. For others, even though CRMO is controlled, chronic pain (amplified musculoskeletal pain) that does not respond to medications can develop. This type of pain may require treatment in a pain clinic.