

## Rheumatoid Arthritis

Rheumatoid arthritis is a progressive, chronic condition that damages the joints. The immune system does not work properly and attacks the lining of the joints, called the synovium. The condition commonly affects the hands, knees or ankles, and usually the same joint on both sides of the body. It may also affect other parts of the body. Researchers are not sure why people develop rheumatoid arthritis. It is estimated that only up to 1% of people worldwide have rheumatoid arthritis. A similar pattern has been observed in South Africa.

### Signs and symptoms of rheumatoid arthritis

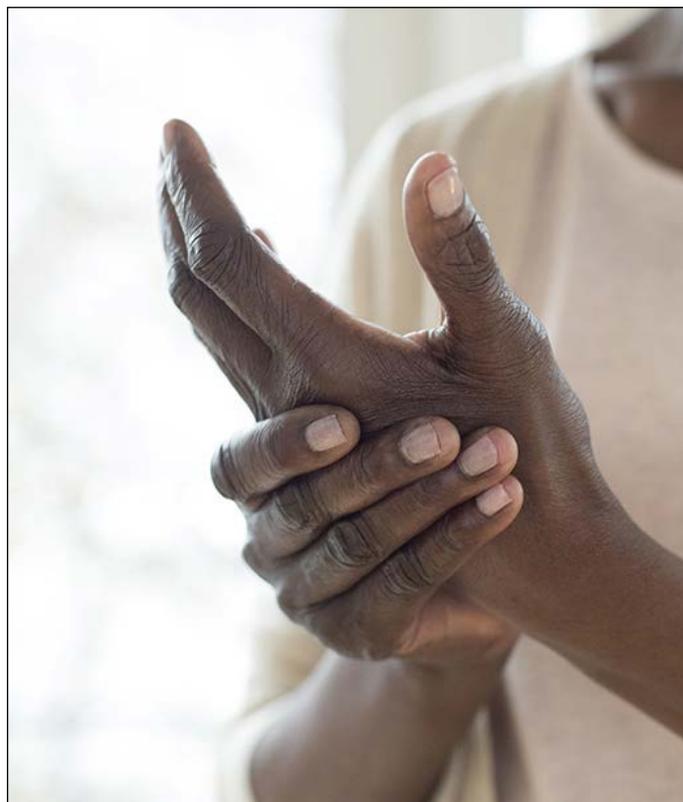
During the early stages of rheumatoid arthritis, people may only experience tenderness and pain without redness and swelling of the joints, and it tends to affect the smaller joints first. The symptoms may include but are not limited to the following:

- Pain, stiffness and tenderness in more than one joint at rest and when moving
- Weight loss
- Loss of appetite
- Fever
- Fatigue (tiredness)
- Weakness

### Risk factors of rheumatoid arthritis

The following traits may increase the risk of developing rheumatoid arthritis:

- Family history - The risk is increased if a family member has rheumatoid arthritis.
- Age - Rheumatoid arthritis occurs mostly amongst middle-aged adults. However, it can start at any age.
- Hormones - Women are two or three times more likely to develop rheumatoid arthritis than men. Women who have never given birth may be at greater risk of developing rheumatoid arthritis.
- Smoking - Cigarette smoking increases the risk of developing rheumatoid arthritis, particularly if there is a hereditary predisposition for developing the condition. Smoking can also make the condition worse.
- Obesity - People who are overweight have a higher risk of developing rheumatoid arthritis.
- Illness or infection – Sometimes, the body can trigger a heightened immune response during infection, sending



a message to begin attacking the healthy tissue of the joints (this is more likely in people with a family history of rheumatoid arthritis, but unfortunately, it can happen to anyone).

- Stress - Chronic stress or even one single extremely stressful event (like a death in the family or a traumatic accident) can cause rheumatoid genes to be activated in a person who has the genes due to their family history.

## **Complications of rheumatoid arthritis**

Rheumatoid arthritis increases the risk of developing the following:

- Heart problems - Heart attack and stroke are the leading causes of death in people diagnosed with rheumatoid arthritis.
- Lung problems - People with rheumatoid arthritis are at risk of inflammation and scarring of the lung tissues, which can result in shortness of breath.
- Rheumatoid nodules - Bumps often appear on the hands and elbows.
- Carpal tunnel syndrome. If rheumatoid arthritis affects the wrists, the swelling can compress the nerve that supports most of the hand and fingers.
- Osteoporosis - This is a condition that weakens the bones and makes them more prone to break. Some medications used to treat rheumatoid arthritis weaken the bones as a side effect. Doing weight-bearing exercises and taking vitamin D and calcium may help to prevent this complication.
- Eye problems - Dry eye is a prevalent complication of rheumatoid arthritis. People with this condition are more likely to develop a condition that decreases the amount of moisture in the eyes and mouth, called Sjogren's syndrome. Long-term eye dryness can lead to scarring, ulceration, infection, and tearing of the cornea.
- Infection - Rheumatoid arthritis and many of its treatments impair the immune system, leading to increased infections.
- Blood conditions - Rheumatoid arthritis can cause anaemia, reducing red blood cells. Anaemia can cause a fast heartbeat, tiredness, shortness of breath, dizziness, leg cramps, and sleeplessness. The risk of developing a group of blood cancers that develop in the lymph system, known as lymphoma, is also increased.
- Mental Health - Depression, anxiety, and stress are widespread in people with rheumatoid arthritis. Depression and anxiety are not just "feeling sad" or "feeling worried" — these conditions affect brain interaction and performance.

## **How do you diagnose rheumatoid arthritis?**

It can be difficult to diagnose rheumatoid arthritis when the condition is in its early stages. Rheumatoid arthritis is diagnosed by reviewing the symptoms, physical examination, and X-rays and laboratory (blood) tests. An ultrasound of the joints is also helpful in diagnosing rheumatoid arthritis.

## **How do we treat or manage rheumatoid arthritis?**

There is no cure for rheumatoid arthritis. Treatment aims to keep a patient functional, and the target is to decrease the severity of the condition as well as prevent worsening of the condition. Treatment is best managed by a doctor called a

rheumatologist, together with other specialists that may be needed. The medications used to treat rheumatoid arthritis are disease-modifying agents (DMARDs) or biological treatments. Biological treatments are not used as first-line therapy in South Africa.

Vitamin D, calcium for bone protection, analgesics and non-steroidal anti-inflammatories (NSAIDs) for pain management are also used to treat rheumatoid arthritis. A holistic approach with referral to an occupational therapist, podiatrist, physiotherapist, clinical psychologist and social worker, as appropriate, is required. Embracing a healthy lifestyle that includes regular exercise, weight loss (if overweight), and discontinuation of smoking is greatly beneficial. Not treating the condition will lead to deformities of the joints, decrease function, and increase the risk of death.

## **What is covered under the PMB level of care?**

Rheumatoid arthritis is included in the Chronic Disease List (CDL) of the Prescribed Minimum Benefit (PMB) regulations. Medical schemes must fully fund the diagnosis, treatment, and care of rheumatoid arthritis. The treatment of rheumatoid arthritis is specified in the algorithm in the regulations, which is available [here](#).

The medical scheme may use medicine formularies (a list of specific medicine for the treatment of the condition), so it is essential to check with the medical scheme which medicines are included in the medicine formularies to avoid a co-payment on the chronic medication. Should a member or beneficiary of a medical scheme choose to use medicines, not in the formulary, the medical scheme can apply a co-payment on the treatment.

Medical schemes are also allowed to put in place baskets of care that will allow for a specific number of consultations, blood tests and other tests to follow up on the condition. When members or beneficiaries of medical schemes require care outside of the normal basket of care, the scheme cannot completely refuse to fund the care. The treating doctor should send a letter of motivation to the medical scheme indicating the required care and the reasons. If clinically appropriate, the medical scheme has to fund as PMB.

## **References:**

1. Adelowo, O., Mody, G.M., Tikly, M., Oyoo, O. & Slimani, S. 2021. Rheumatic diseases in Africa. *Rheumatology*, 17: 363-374.
2. Almoallim, H., Al Saleh, J., Badsha, H., Ahmed, H.M., Habjoka, S., Menassa, J.A. & El-Garf, A. 2021. A review of the prevalence and unmet needs in the management of rheumatoid arthritis in Africa and the Middle East. *Rheumatology and Therapy*, 8:1–16.

3. Arthritis Foundation. 2021. Rheumatoid arthritis: causes, symptoms, treatments and more. [online]. Available at: <https://www.arthritis.org/diseases/rheumatoid-arthritis> [Accessed 13 July 2022].
4. Centers for Disease Control and Prevention. 2020. Rheumatoid arthritis (RA). [online]. Available at: <https://www.cdc.gov/arthritis/basics/rheumatoid-arthritis.html> [Accessed 13 July 2022].
5. England, B.R. and Mikuls, T.R. 2022. Epidemiology of, risk factors for, and possible causes of rheumatoid arthritis. [online] Available at: <https://www.uptodate.com/contents/epidemiology-of-risk-factors-for-and-possible-causes-of-rheumatoid-arthritis> [Accessed 13 July 2022].
6. Li, S, Yu, Y., Yue, Y., Zhang, Z., Su, K. 2013. Microbial Infection and Rheumatoid Arthritis. *J Clin Cell Immunol*, 4(6):174.
7. Mayo Clinic. 2021. Rheumatoid arthritis - diagnosis and treatment. [online]. Available at: <https://www.mayoclinic.org/diseases-conditions/rheumatoid-arthritis/diagnosis-treatment/drc-20353653> [Accessed 06 July 2022].
8. South African Rheumatism & Arthritis Association. 2020. SARAA patient education resources. [online]. Available at: <https://saraa.co.za/wp-content/uploads/2020/10/Rheumatoid-Arthritis.pdf> [Accessed 12 July 2022].
9. Usenbo, A., Kramer, V., Young, T & Musekiwa, A. 2015. Prevalence of arthritis in Africa: A systematic review and meta-analysis. *PLoS One*, 10(8): 1-19.

The Communications Unit would like to thank the Clinical Unit for assisting with this edition of CMScript

**Contact information:**

information@medicalschemes.co.za

Hotline: 0861 123 267

Fax: 012 430 7644

The clinical information furnished in this article is intended for information purposes only and professional medical advice must be sought in all instances where you believe that you may be suffering from a medical condition. The Council for Medical Schemes is not liable for any prejudice in the event of any person choosing to act or rely solely on any information published in CMScript without having sought the necessary professional medical advice.