

Patient and Family Information Leaflet

Rheumatoid Arthritis

What is Rheumatoid Arthritis?

Rheumatoid Arthritis (RA) is an autoimmune disease leading to joint inflammation. It is one of the most common forms of inflammatory arthritis. 1 in every 100-200 people of the general population may be affected by RA and it can happen at any age. RA is more common in women.

What causes RA?

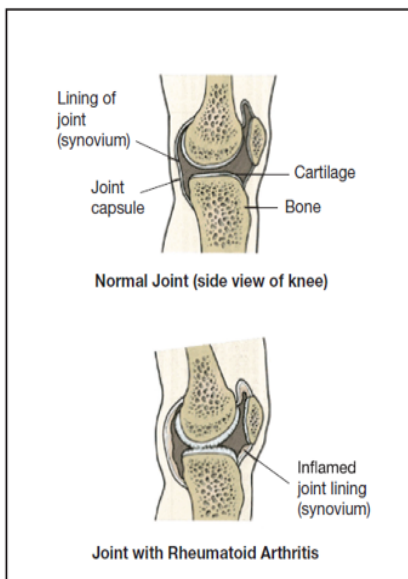
RA is an autoimmune disease. Our immune system normally protects us from infections. However, in people who develop autoimmune diseases, the immune system becomes confused and overactive and attacks our own body.

For patients with RA, this results in joint inflammation that can eventually damage the joint, cartilage and surrounding bones. The joints most affected by RA are the small joints of the hands, wrists, ankles and feet; however, any joint can be affected. Other organs may also be affected in RA such as the eyes and lungs. Uncontrolled RA is a risk factor for heart disease and stroke.

The exact cause of RA is currently unknown.

Genetics and environmental factors may contribute to the development of RA.

Smoking and poor dental hygiene are the strongest risk factors.



What are the signs and symptoms of RA?

- Joint pain and swelling: usually at the hands (especially knuckles), wrists, ankles, feet
- Joint stiffness lasting >30min usually worst in the morning
- Other symptoms include tiredness and sometimes loss of appetite or weight

How is RA diagnosed?

RA is diagnosed based on your symptoms and clinical examination by a doctor. Blood tests may show elevated inflammatory markers (e.g. erythrocyte sedimentation rate or C-reactive protein). Antibody tests such as rheumatoid factor and/or anti-cyclic citrullinated peptide are not essential for diagnosis but may help predict disease outcome. X-ray or ultrasound scans of the hands or feet may also be conducted.

A positive rheumatoid factor alone is not diagnostic of RA in the absence of any clinical symptoms. Up to 3-8% of the normal population may have a positive rheumatoid factor.

What is the treatment of RA?

Rheumatoid arthritis is a chronic condition that can be effectively treated with medications and lifestyle changes. Prompt treatment can reduce symptoms and prevent joint damage and deformities. It is important for patients with RA to attend regular medical check-ups and take medications as prescribed even when they feel well, to avoid disease flares.

1) Medication

- **Conventional DMARDs**

Disease-modifying anti-rheumatic drugs (DMARDs) are the mainstay of long-term RA management. These are medications that suppress the overactive immune system from further damaging the joints. Methotrexate (MTX) is the cornerstone of treatment and is usually prescribed to most patients with RA. MTX is given weekly in the form of tablets or subcutaneous injections (injections under the skin usually given in the abdomen or thighs). Folic acid is usually taken the day after MTX to reduce side effects associated with MTX. Other conventional DMARDs include oral medications (e.g. hydroxychloroquine, sulfasalazine, leflunomide).

- **Biologic Agents**

Biologic medications are more targeted injection medications given subcutaneously or through the veins (e.g. infliximab, adalimumab, golimumab, etanercept, certolizumab pegol, rituximab, abatacept and tocilizumab).

- **Targeted synthetic DMARDs**

Newer targeted DMARDs have been developed. These are oral tablets and are usually given for patients with more severe disease or when conventional DMARDs have failed to control disease activity adequately (e.g. tofacitinib, baricitinib, upadacitinib and filgotinib)

Some patients require combination therapy with more than one of the above medications. Patients on DMARDs will require regular blood tests to monitor for any potential side effects.

- **NSAIDs and steroids**

Nonsteroidal anti-inflammatory drugs (NSAIDs) and low dose steroids may be used as adjunctive treatment in the early management of RA as these medications work

quickly to relieve symptoms. These medications may be given as tablets or through intramuscular injections. In patients with severe joint inflammation, steroids may be injected directly in the affected joint(s) for rapid relief.

2) Rest and exercise

Physiotherapy and occupational therapy is recommended in patients with functional impairment from joint deformities and for pain relief.

RA is often associated with other medical conditions such as osteoporosis, high cholesterol, diabetes and high blood pressure. These conditions should be addressed as part of holistic care for RA. Certain vaccinations are recommended to prevent common infections, such as influenza, pneumococcal, shingles and Respiratory Syncytial Virus (RSV).

What should I do if I have been diagnosed with RA?

Feelings of helplessness, low self-esteem and anxiety are common. Lifestyle changes are an important aspect of RA management. Patients should be empowered to play an active role in their care.

- Avoid smoking
- Maintain good dental hygiene
- Eat a balanced diet
- Stay active and exercise in moderation when inflammation is under control. Exercise helps to rebuild muscle.
- Sufficient rest is important when joint is acutely swollen and painful.
- Lose weight if you are overweight
- Reach out for support – whether through friends, family, or support groups such as the National Arthritis Foundation

Is there any dietary recommendation for patients with RA?

There are no foods that trigger RA flares. Patients with RA are advised to eat a balanced diet rich in fruits and vegetables. Reduce diet with high amounts of processed food, refined carbohydrates and saturated fats. The mediterranean diet is a form of diet which incorporates the above recommendations and is recommended in patients with RA.

Raw and partially cooked food should be avoided to reduce risks of infections if you are taking DMARDs and/or steroids.

Can patients with RA become pregnant?

Patients with RA can have successful pregnancies. It is important to discuss any pregnancy plans early with your rheumatologist as some medications are not suitable for pregnancy.

If I have RA, will my children have RA too?

There is a slight increased risk (2 to 4 times of the normal population risk) that your child may develop RA, but the overall risk remains low <5%.

Notes:

NUHS Rheumatology Cluster

National University Hospital

5 Lower Kent Ridge Road, Singapore 119074

OneNUHS Hotline: (65) 6908 2222

OneNUHS General Enquiries: contactus@nuhs.edu.sg

OneNUHS Appointments: appointment@nuhs.edu.sg

www.nuh.com.sg

Ng Teng Fong General Hospital and Jurong Community Hospital

1 Jurong East Street 21, Singapore 609606

OneNUHS Hotline: (65) 6908 2222

OneNUHS General Enquiries: contactus@nuhs.edu.sg

OneNUHS Appointments: appointment@nuhs.edu.sg

www.ntfgh.com.sg

www.jch.com.sg

Alexandra Hospital

378 Alexandra Road, Singapore 159964

OneNUHS Hotline: (65) 6908 2222

OneNUHS General Enquiries: contactus@nuhs.edu.sg

OneNUHS Appointments: appointment@nuhs.edu.sg

www.ah.com.sg

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