

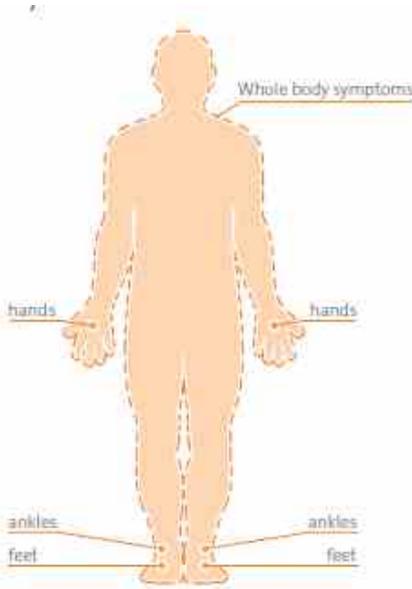


Know about

# RHEUMATOID DISORDERS



## What is Rheumatoid Arthritis (RA)



**R**A is a disease where your immune system mistakenly targets your own body. It especially affects the lining of the joints between your bones.

Early symptoms include swelling, heat, tenderness, pain or stiffness in your joints.

In some cases, when the swelling goes down, the joint capsule remains stretched and can no longer hold the joint in its proper position. As a result the joint becomes unstable and this can lead to joint damage. The extent to which this happens varies a great deal from person to person. Most people with RA have some damage in a number of joints, and a few have quite severe damage in a lot of joints.

## Symptoms

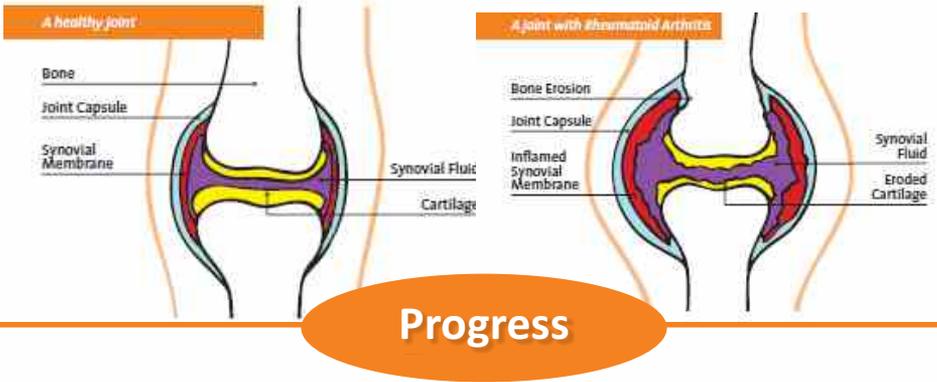
In most people RA affects symmetrical joints (the same joints on both sides of the body). Usually it starts quite slowly. A few joints often the fingers, wrists or the balls of the feet (the padded portion of the sole of the human foot between the toes and the arch, on which the weight of the body rests when the heel is raised) become uncomfortable and may swell, often intermittently.

You may feel stiff when you wake up in the morning. For some people the disease develops very rapidly. There may be a sudden onset of pain and swelling in joints, with severe morning stiffness and you may

experience great difficulty doing everyday tasks.

Along with pain and swelling in the joints you may feel tired, depressed or irritable, even with mild arthritis. Fatigue can be one of the most difficult aspects of rheumatoid arthritis for people to deal with.

Symptoms for RA tend to come and go with no particular pattern. You may have periods when the joints become more inflamed and painful (flare-ups). Sometimes this has an obvious cause – either physical, illness, or emotional but usually there is no obvious cause.



It is very important that you see your doctor as soon as you can if you have any RA symptoms. Blood tests and x-rays will help your doctor to assess how fast the arthritis is developing and how quickly it is likely to progress in the future. This in turn will help decide which form of treatment to recommend.

RA affects people differently. For some people, it lasts only a year or two and goes away without causing any noticeable damage.

Other people have mild or moderate forms of the disease, with periods of worsening symptoms (flare-ups) and periods in which they feel better (remissions).

Approximately 1 in 20 people will have RA which becomes progressively worse, often quickly.

These people tend to develop inflammation in other parts of the body besides their joints.

RA can affect virtually every area of a person's life from work life to family life.

It is very important that treatment for RA is started as early as possible.

Current treatment strategies, including medications that slow joint damage, a balance between rest and exercise, and patient education and support programmes, allow most people with the disease to lead active and productive lives.

Regular medical check-ups are an important part of managing RA, including checking blood pressure and monitoring cholesterol and other risk factors for heart disease.

## ●● How do doctors diagnose ●●

There is no single test which can make a certain diagnosis of early RA. Doctors have to make what is known as a 'clinical diagnosis', where they put together all the information after listening to you and examining you. This is one of the reasons why you should tell your doctor all the symptoms you have had, not just the ones you think are important.

Your doctor may suggest any of the following tests:

## Complete blood count

This test measures how many of each type of blood cell are in your blood. This will show anemia as well as abnormalities in white blood cell counts or platelet counts that could be associated with RA.

## X-rays and other imaging techniques

May be recommended by the doctor, if your condition requires.

## Treatment

It is very important that treatment for RA is started as early as possible and that you see your doctor as soon as you can if you have any RA symptoms. Although there is no cure for rheumatoid arthritis as yet, a variety of treatments are available that can slow down the disease and minimise the joint damage that it causes. The best medical care combines medication and non-drug approaches.

## Treatment with Drugs

Each person responds differently to arthritis medicines, which means that you will need to work with your rheumatologist who will tailor your treatment to your symptoms and the severity of your condition. Your doctor may need to trial several different treatments before finding the one, with the least side effects, that is right for you.

### Medications commonly prescribed for RA include:

#### NSAIDs

A group of medicines known as non-steroidal anti-inflammatory drugs

#### Corticosteroid medicines

or injections

#### DMARDs

a range of medicines that are known as disease-modifying anti-rheumatic drugs, including Biologics.

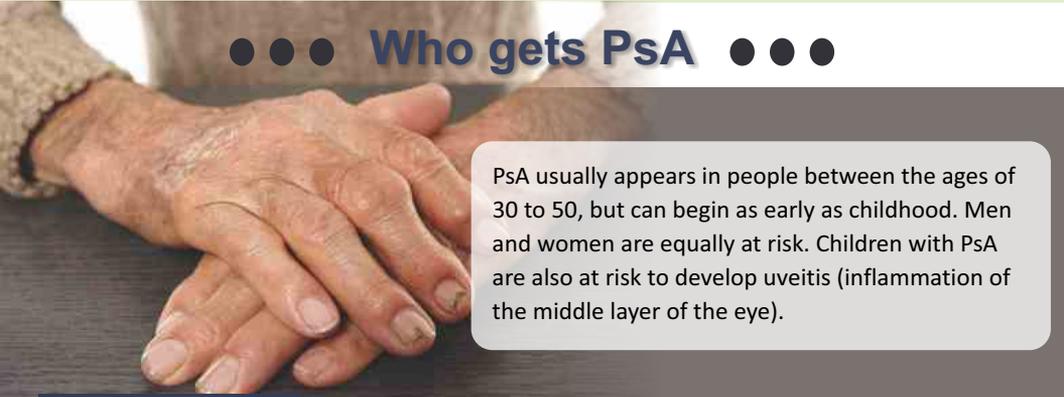


## What is Psoriatic Arthritis (PsA)

PsA is an inflammatory arthritis that may cause joint pain and swelling. It can affect any of the joints in the body, although some joints are more likely to be affected than others. PsA in the spine, called spondylitis, causes pain in the back or neck, and difficulty in bending. PsA also can cause tender spots where tendons and ligaments join onto bones, which can result in pain at the back of the heel, the sole of the foot, around the elbows or in other areas.

PsA usually affects people who already have psoriasis, a skin condition that causes a red, scaly rash, especially on the elbows, knees, back, buttocks and scalp. However, some people develop the arthritic symptoms before the psoriasis, while others will never develop the skin condition.

### Who gets PsA



PsA usually appears in people between the ages of 30 to 50, but can begin as early as childhood. Men and women are equally at risk. Children with PsA are also at risk to develop uveitis (inflammation of the middle layer of the eye).

### What Causes PsA

The causes of PsA are not known. Heredity may play a role – 40 percent of people with PsA have a family member with PsA. Environmental factors such as infection can be another factor in causing this type of arthritis. This has yet to be proven in research.

### Symptoms

PsA usually starts slowly; people develop skin symptoms first and then develop joint inflammation, however some people may develop arthritis without any skin problems.

Joints become inflamed causing pain, swelling and stiffness. The impact of PsA depends on the joints involved and the severity of symptoms.

Symptoms vary from person to person, the most common symptoms of PsA can include:

Pain and stiffness in one or more joints

Buttock pain, a stiff back or a stiff neck, which is caused by inflammation in the spine

Swelling of the fingers or toes, caused by inflammation occurring simultaneously in joints and tendons

Pain and swelling in the heels, caused by inflammation

Discoloration and thickening of the nails

Pain and redness in the eyes

Fatigue

Anaemia

## How is PsA diagnosed

It's important that PsA is diagnosed early so you can start treatment as soon as possible. Doctors will ask about medical history and conduct a physical examination, assessing skin and joints. X-rays are often taken to look for joint damage. MRI, ultrasound or CT scans can be used to look at the joints in more detail.

There is no specific blood test for PsA. However your doctor may recommend blood tests to rule out other types of arthritis that have similar signs and symptoms, including rheumatoid arthritis, gout and osteoarthritis.

## Management of PsA

Treatment for PsA has improved significantly in recent years with effective medicines that can control the condition and prevent joint damage. With the right treatment, most people with PsA can lead full and active lives.

### Medications

#### Non Steroidal Anti-Inflammatory Drugs

NSAIDs reduce inflammatory symptoms, especially pain and stiffness.

## Disease Modifying Drugs (DMARDs)

Reduce pain, swelling and stiffness over a period of weeks or months by slowing down the disease progression and hopefully will stop your arthritis from getting worse.

## Steroid injections

Can be helpful for swollen joints.

## Biological therapies

Target individual molecules involved in the processes of inflammation and joint damage. Biological are the recent advance treatment options available and are very effective. They're often given in combination with a conventional DMARD such as methotrexate.

## What can you do

### Exercise

Many people with PsA develop stiff joints and muscle weakness due to lack of movement. Proper exercise is very important to improve overall health and keep joints flexible. Walking is an excellent way to get exercise. A walking aid or shoe inserts will help to avoid undue stress on feet, ankles, or knees affected by arthritis. An exercise bike provides another good option, as well as yoga and stretching exercises to help with relaxation. Some people with PsA find it easier to move in water, swimming or walking laps in the pool offers activity without stressing joints.

### Preserve your energy

Feeling tired is common for people with PsA. Plan and pace daily activities, varying tasks and allowing time to rest and relax. Extra resources are also available to make life easier. Specially designed chairs and supportive cushions are available to help maintain correct posture while driving or sitting at a desk and simple devices are available to make gardening easier.

### Have a good night's sleep

Sleep is essential for rest and repair of the body. Use a mattress that gives support. Sleep in a position that is most comfortable, but if on the side, avoid a lot of bending at the hips and knees. A few simple stretching exercises in the evening before going to bed may improve your sleep.

### Practice relaxation

this is very important to help to decrease pain by relaxing muscles, getting rid of tension and improving energy levels. There are many different techniques that you can try.

## What is Ankylosing Spondylitis (AS)

AS mainly affects the spine and causes ongoing inflammation of soft tissues around the spinal bones (vertebrae). Over time, the process of spinal inflammation may lead to fusion of part of the spine and sometimes the pelvis, which can cause loss of movement of the spine.

## Who gets Ankylosing Spondylitis

Symptoms usually develop between the ages of 15 and 35, rarely older than 40 years. Men are generally more severely affected than women, the reasons for this are unknown.

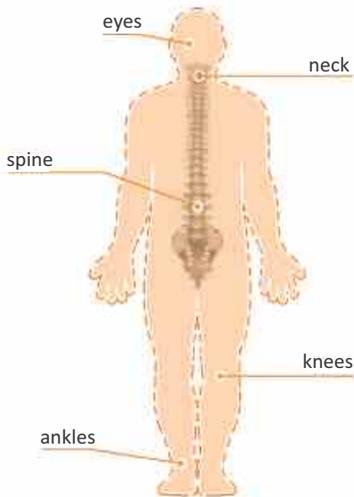
## Causes

There is a strong tendency for AS to run in families, especially if you have a close relative with AS.

There is also a genetic overlap between AS and inflammation of the bowel, especially a condition called Crohn's disease.

Smoking tends to make AS worse, and stopping smoking may be helpful.

### Common areas affected by ankylosing spondylitis



## Symptoms

The most common symptoms are pain and stiffness in the back and neck – often causing people to wake up at night. The stiffness tends to improve once people get moving. Sometimes joints such as the knee and tendons, especially around the ankle, can be affected.



## How does it progress

Some people with AS experience a loss of spinal flexibility with time. In a small proportion of people, the condition is severe enough for them to stop work or change their employment.

## How is it Diagnosed

Early diagnosis of AS is important because spinal deformity can be minimised and loss of mobility can be reduced with appropriate management. Although there is currently no cure or prevention for AS, the treatment options have improved in recent years so the disease can be well managed.

The diagnosis of AS is made from an assessment of symptoms, physical examination findings, blood tests and X-rays or MRI scans. These will be recommended by a rheumatologist who can explain the result of each test.

## How is it Treated

Treatment of AS is provided by a team of health professionals such as your rheumatologist and physiotherapist.

It is important that you take medicines to decrease inflammation and prevent joint damage. Medicines used for AS fall into the following categories:

## Biologic Medicines

Apart from NSAIDs and DMARDs, biologics are the latest disease modifying medicines used for treating severe AS and can be very effective in those severely affected. They are given by injection.

## What can you do

### Maintaining a good posture

When standing and sitting – good posture is important; those with AS have a tendency to bend forward and stoop but poor posture may impact negatively on the spine's function.

When standing, keep body weight balanced and even on both feet with shoulders relaxed (back and down). Keep the back of the neck long, allowing the chin to drop slightly forward. Do not stand still for too long and when moving, try to maintain this tall, relaxed posture.

### Keeping physically active

It is essential to perform exercises that are designed to stretch tight muscles and ligaments, encourage full mobility and to strengthen postural muscles. Do exercises designed to increase the strength and endurance of these muscles, to make it easier to keep in an upright position with good posture. Specific AS exercises for up to 30 minutes a day, at least five times a week (preferably every day), are recommended. A moderate, consistent exercise programme is generally the best way to get results for AS.

# Ankylosing Spondylitis

## Preserving energy

feeling tired is common for people with AS. Plan and pace daily activities, varying tasks and allowing time to rest and relax. Extra resources are also available to make life easier. Specially designed chairs and supportive cushions are available to help maintain correct posture while driving or sitting at a desk and simple devices are available to make gardening easier.



## Practice relaxation



is very important especially if the rib joints are involved. Learn how to relax the muscles, getting rid of tension can help to decrease pain, improve sleep and energy levels.

## Stop smoking

smoking is associated with worse outcomes in AS.



## Having a good night's sleep



is essential for rest and repair of the body. Use a mattress that gives support. Sleep in a position that is most comfortable, but if on the side, avoid a lot of bending at the hips and knees. A few simple stretching exercises in the evening before going to bed may improve your sleep.

## Healthy eating

there is no scientific evidence that diet has an effect on AS. However, a good balanced diet is important for maintaining general health and energy levels and for preventing osteoporosis.



## What is Juvenile Idiopathic Arthritis (JIA)

JIA is a type of arthritis that occurs in children aged 16 or younger. 'Juvenile' means that young people and 'Idiopathic' means that the exact cause is not known. 'Arthritis' means inflammation of joints; it causes joint swelling, stiffness and pain. JIA is a chronic condition and it lasts more than six weeks.

## Types of Juvenile Idiopathic Arthritis

JIA includes many types of arthritis, the most common are: oligoarticular and polyarticular.

### Oligoarticular

#### JIA:



- Most common type of JIA affecting about 50-60 percent of children with arthritis
- Often begins between 2 and 4 years of age
- Is more common in girls than in boys
- Initially can affect four joints or less. About 20-30% children will develop more than 4 inflamed joints after 6 months
- Children with this type of arthritis can develop eye inflammation (iritis or uveitis). This usually has no symptoms, so regular eye checkups are important.

### Polyarticular

#### JIA:



- Affects 20-30% of children with arthritis
- Is more common in girls than in boys
- Can begin at any age
- Affects five or more joints.

## Symptoms

Signs and symptoms of JIA change over time, sometimes even day to day. Times without symptoms (remissions) followed by a reappearance of symptoms from ('flare-ups').

### Symptoms may include:

- 
- pain, stiffness, swelling, especially in the morning and a joint that feels warm to the touch
  - limping or "going off their feet"
  - fatigue
  - loss of appetite
  - loss of weight
  - high fever and skin rash (systemic JIA)
  - swelling in lymph nodes in the neck and other parts of the body

JIA can also cause bones to grow unevenly.

## Uveitis

Uveitis is inflammation of parts of the eye, including the iris (the coloured bit of the eye) and the muscles and tissues doesn't it hurt, and it is hard to tell if there is inflammation just by looking at the eye. However if uveitis is not treated it can cause vision loss. It is very important to have regular check-ups with an ophthalmologist (eye doctor) to check if there is inflammation in the eyes.



## Diagnosis

If JIA is suspected, the child should be referred to a Paediatrician, who will liaise with a Paediatric rheumatologist. There is no single test to confirm a diagnosis of JIA, and reaching a diagnosis may take time. This can be very frustrating for families. The diagnosis of JIA is based on medical history, physical examination, laboratory tests, x-ray and other tests.

Medical investigations may include: \_\_\_\_\_

### Blood tests



This is done to detect anemia, inflammation and present of antibodies



### X-rays

of the affected joints are usually needed to allow the doctor to look for any joint damage.

### Ultrasound and magnetic resonance imaging

(MRI) scans are other ways to look at the soft tissue structures of the joints for signs of inflammation.

## Aspiration of a joint

is where the fluid from a swollen joint is removed to be tested in a lab, to check for possible infection.

Some tests may be ongoing or have to be repeated several times. This helps the doctor look for changes to your child's symptoms over time.

## Management and treatment options

The overall goal of managing JIA is for your child and family to lead as normal a life as possible. A team of health professionals will provide a range of treatments and support to make sure that your child leads an active and enjoyable life. The make-up of your child's team will depend on how the illness is impacting on your child's well-being. Your child's Paediatrician will coordinate this team.

### This team may include:

Paediatrician/Adult Rheumatologist/ Physiotherapist/ Nurse/Dietician

## Medications

### Biological Therapies (biosimilars)

Biological therapies (biosimilars) are newer very effective drugs that have been available for about 10 years. Your doctor can decide the right drug for the child once disease cannot be controlled by DMARDs. Biologics slow down the progress of arthritis, and reduce pain, swelling and stiffness. Like DMARDs they work by suppressing the immune system, and inhibiting the body's over production of inflammatory substances such as TNF alpha. Children on biologics are monitored for side effects. Some children are more likely to catch infections, live virus vaccines should not be given while your child is on this therapy. \*Remember to let your doctor know about other prescribed medications or natural therapies that your child is taking as they may interact with their arthritis medications.