

Resource

# What is JIA?

Juvenile Idiopathic Arthritis (JIA) means there is inflammation in a child's joints that isn't caused by f different types of arthritis that occur under the age of 16.



#### Article

#### JIA and RA

As an organisation, NRAS cover both juvenile idiopathic arthritis (JIA) and rheumatoid arthritis (RA). There are certainly a lot of similarities between these two conditions and the following article will help you to understand both the similarities and the differences.



# What's in a name?

Your child has been given a diagnosis of Juvenile Idiopathic Arthritis; this is a long name and is difficult to remember, so we shorten it to JIA. This means there is inflammation in your child's joints that isn't caused by any other condition.

Each word literally means:

Juvenile:	your child was aged 16 or under when the problem started
Idiopathic:	there is no other explanation for the inflammation in their joints
Arthritis:	simply means there is inflammation inside the joint and we can see this by the swelling, warmth and reduced movement in your child's joint(s)

# Types of JIA

The type of JIA your child has is determined by the number of joints that are affected in the first 6 months of their disease and any other problems they are having such as, pain in their feet or back.

#### Oligoarthritis

This is when fewer than 5 joints are affected in the first six months.

Your child may go on to develop arthritis in other joints after the first 6 months and this will then be called extended oligoarthritis.

#### Polyarthritis

Polyarthritis is diagnosed when 5 or more joints are affected in the first 6 months. There are 2 types of polyarthritis, one where a blood test is positive for rheumatoid factor (RF) and one where it is negative.

#### Enthesitis Related Arthritis (ERA)

Enthesitis Related Arthritis (ERA) is when there is inflammation in the places where the tendons attach to the bone and your child may suffer from pain in the bottoms of their feet, around their hips, knees or in their back.

#### **Psoriatic Arthritis**

Psoriatic Arthritis can affect any joint but often involves the fingers and toes. There may have been a swollen, 'sausage' shaped toe, when your child was younger that got better on its own; this is known as dactylitis [dak-ti-li-tis]. Psoriasis is a scaly rash typically affecting the knees and elbows. Often, psoriatic arthritis is diagnosed when there is no evidence of psoriasis in your child but there is a family member with psoriasis and some typical changes to the nails.

#### Systemic onset JIA

Systemic onset JIA is diagnosed if your child had a fever or rash at the beginning of their illness.

#### Undifferentiated arthritis

Undifferentiated arthritis this means your child's symptoms do not fit neatly into any one of the other types of JIA and so is given this name.

Trying to decide which type of arthritis your child has is not always so black and white and you may start in one group and move to another. Knowing which group your child is in helps decide what treatments they may need. The quicker we get treatment started and arthritis controlled, the better the long-term outlook.

# What causes the arthritis?



- 1. Your child's immune system has become overactive or poorly controlled and mistakenly sees the lining of their joints as 'foreign' to their body, like an infection. As a result, it starts to attack the lining (synovium) which then causes inflammation and swelling of the lining and fluid in the joint.
- 2. Infection may be a trigger for the start of arthritis but no particular infection has been identified that makes this happen. Quite often a viral infection causes 'reactive arthritis' but in this case, the immune system settles down after a week or two and arthritis disappears. We don't know why the immune system doesn't settle down in those children and young people who develop JIA.
- 3. Is it inherited? Many families have a family member with arthritis. However, arthritis, particularly 'wear and tear' arthritis (osteoarthritis), is common. If there are members of the family with rheumatoid arthritis or other rheumatological conditions such as lupus, this does increase the chance of developing arthritis but does not mean it is directly inherited or passed down the family.

# How common is JIA?

Often parents ask how common JIA is and why nobody has ever heard of it. In fact, it is not

#### uncommon!

It is estimated that 1 in 1,000 are affected by JIA, 1,000 people diagnosed each year, and 10,000 people live with the condition.

This figure doesn't include people who have been diagnosed with JIA but are over 16. The total number of people with JIA regardless of age is currently unknown.

## The future

So you'll want to know what will happen next and in the future. Our aim is for your child to be well and doing all the activities they enjoy as well as joining in with their friends.

We would like the arthritis to be completely controlled – this is called remission.

This means your child will need to have some treatment. For some children, this may mean they need to have a <u>steroid injection</u> into the joints to help control the inflammation. These injections help to ease the pain and reduce the swelling and are usually given to a child who has only a few affected joints. Before being given a steroid injection your child will receive some form of pain relief (analgesia) so that the procedure is as comfortable as possible Younger children will often require a short general anaesthetic to allow the procedure to take place, whereas older children will often be able to cope with local anaesthetic injections alongside "Entonox" (inhaled pain relief also known as "laughing gas"). We will then monitor your child to see if their arthritis returns.

If more joints are affected or, arthritis doesn't respond well to <u>steroid injections</u> we will need to add an additional treatment(s) for example, methotrexate and/or biologics. These drugs will help to calm your child's immune system and reduce the inflammation as well as reducing the chance of it from returning.

The most important factors to ensure your child doesn't have bad arthritis and joint damage when they are adults are:

- 1. Early diagnosis and treatment the longer arthritis has been active before treatment starts the more difficult it is to control the disease and damage may already have occurred.
- 2. If the arthritis doesn't respond well to initial treatments, other treatments should be added or substituted until the arthritis is controlled. We don't like to see any inflammation even if you think you are coping with it.
- 3. Some groups have more severe disease these include; systemic-onset JIA when temperatures have been difficult to control in the first 6 months and polyarticular course JIA particularly with a positive rheumatoid factor. If there is already evidence of joint damage on X-rays at the time of diagnosis or hips are involved, these also predict a more difficult course.

So the key to a good outcome is to get on with treatment. It's very hard to predict what will happen in the long term but we need to watch and monitor what happens and how well the arthritis responds to treatment.

# Living with arthritis

Many people other than the <u>health care team</u> will be involved with your child as they grow up. They will be important to you, your child and daily life. These include other family members such as brothers, sisters, grandparents as well as friends and neighbours.

Teachers also play an important role in your child's life and need to understand how JIA may affect your child at school. Often teachers find it difficult to understand the impact of JIA because the symptoms may vary from day to day, maybe well-controlled but then flare. What is needed to support your child may need to change. There is information available for teachers and members of the team can also help with this.

The most important aspect to remember is that arthritis for the majority of children and young people responds well to treatment and your child will be able to do everything their friends are able to do with the support of a team of experts.

## **Related articles**

Living with JIA

#### Steroid injections

Introduction Intra-articular steroid injections (IAS) are frequently used as first line treatment in Juvenile Idiopathic Arthritis (JIA). As such, IAS may be considered as medication to induce remission in inflamed joints, and for some patients IAS may be the only medical treatment that is required, usually those with a small number of inflamed joints (oligoarthritis). [...]

Your Healthcare Team

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