



Juvenile idiopathic arthritis

- Juvenile idiopathic arthritis is a group of inflammatory joint conditions that affect children and teens under the age of 16
- Symptoms include joint pain, swelling and stiffness
- Working closely with your healthcare team will lead to the best outcomes for your child

Most people think that arthritis only affects older people. The truth is one in 800 Australian children has a form of juvenile idiopathic arthritis ¹.

It's one of the most common chronic conditions to affect children.

What is JIA?

If we break the words up, it provides some clues about juvenile idiopathic arthritis:

- juvenile - it affects people under the age of 16
- idiopathic - we don't know what causes it to occur
- arthritis - inflammation of the joint.

So JIA is a group of conditions that causes joint pain and swelling in children and teens under the age of 16, for some unknown reason.

Other names that it may be called include: juvenile rheumatoid arthritis, juvenile arthritis, juvenile chronic arthritis and Still's disease.

Causes

We don't really know what causes JIA. But we do know that it occurs as a result of a malfunctioning immune system.

Your immune system is designed to identify foreign bodies (e.g. bacteria, viruses) and attack them to keep you healthy. However in the case of JIA, the immune system mistakenly attacks healthy tissue in and around the joints, causing ongoing inflammation and pain.

Types of JIA

There are different types of JIA including:

- oligoarticular JIA
- polyarticular JIA
- systemic JIA
- enthesitis-related JIA
- psoriatic JIA
- undifferentiated JIA.

Oligoarticular JIA

This is the most common form of JIA. It's also sometimes called pauciarticular JIA. 'Oligo' and 'pauci' means not many or few - so few joints are affected.

Polyarticular JIA

Polyarticular JIA affects five or more joints. 'Poly' means many. There are two types of polyarticular JIA:

- polyarticular JIA-rheumatoid factor positive
- polyarticular JIA-rheumatoid factor negative.

Systemic JIA

Systemic JIA can affect many areas of the body, not just the joints. It's the least common type of JIA.

Enthesitis-related JIA

Entheses are the tissues that attach tendons and ligaments to the bone. This type of JIA affects the entheses as well as the joints.

Psoriatic JIA

Children with psoriatic JIA have inflammatory arthritis of the joints and the skin condition psoriasis.

Undifferentiated JIA

This is where the condition doesn't fit any of the above types of JIA.

Other musculoskeletal conditions

There are other musculoskeletal conditions such as Perthes' disease, fibromyalgia, scleroderma and lupus, that can also affect children. For information on these conditions, please visit our website www.msk.org.au or contact our MSK Help Line.

Symptoms

The symptoms your child experiences will depend on the type of arthritis they have. Common symptoms include:

- pain, swelling and stiffness in one or more joints
- skin over the affected joints may be warm or red
- mental and physical tiredness, or fatigue.
- Less common symptoms include:
- fever
- rash
- feeling generally unwell
- eye inflammation (uveitis).

Diagnosis

JIA is diagnosed using a number of tests including:

- medical history
- physical examination
- blood tests
- x-rays and scans
- eye examination.

Treatment

While there's currently no cure for JIA, treatment can help manage the symptoms. Working closely with your healthcare team will lead to the best outcomes for your child.

Doctors, nurses, physiotherapists, occupational therapists, dietitians, paediatrician, podiatrists, psychologists and social workers may all be a part of the team that treats your child.

Medication

Most children with JIA - regardless of the type - will have to take some form of medication at some time. It depends on the symptoms they're experiencing. There are many different types of medications that work in different ways.

Your doctor will always start with the simplest medications at the smallest doses and work their way up to more complex medications and larger doses depending on how your child's condition responds to the treatments.

The most common types of medications used are:

- pain-relievers (analgesics) - for temporary pain relief.
- creams and ointments - can be rubbed into the skin over a painful joint to provide temporary pain relief.
- eye drops - to treat eye inflammation.
- non-steroidal anti-inflammatory drugs (NSAIDs) - to control inflammation and provide pain relief.
- corticosteroids - are used to quickly control or reduce inflammation. They can be taken as tablets or given by injection directly into a joint, muscle or other soft tissue.
- disease modifying anti-rheumatic drugs (DMARDs) - work on controlling the immune system. These medications help relieve pain and inflammation, and can also reduce or prevent joint damage.
- biologics and biosimilars (bDMARDs) - these newer medications are also a type of disease modifying drug. They also work on controlling the immune system. However unlike other disease modifying drugs, biologics target specific cells and proteins that are causing the inflammation and damage, rather than suppressing the entire immune system.

Self-management

There are many things you and your child can do to manage their condition such as:

Follow the plan that your health professionals have developed - that means taking medications as they've been prescribed, doing the exercises the physiotherapist and/or occupational therapist have provided, and letting your doctor know of any changes to your child's symptoms and how they're feeling. All of these things give your child a better chance of managing their JIA well and reducing the risk of long-term problems.

Stay active - physical activity is the key to maintaining muscle strength, joint flexibility and managing pain. A physiotherapist or exercise physiologist can help design an individual program for your child.

Learn ways to manage pain - from heat and cold treatments, distraction, massage and medication, there are many ways your child can manage pain. Try different techniques until you find the things that work best for your child.

Eat well - while there's no diet that can cure JIA, a healthy and well-balanced diet is the best for good health. Keeping to a healthy weight is also important as extra weight puts added strain on your child's joints, especially load bearing joints such as hips, knee and ankles.

Protect joints - find out about aids, equipment and gadgets that can make tasks easier. An occupational therapist can give you advice.

Stay at school - it's good for your child's health and wellbeing. Talk to your doctor, allied health professionals and teachers about ways to help your child stay at school, and keep up with school.

Where to get help

- Your doctor
- Paediatric rheumatologist
- Physiotherapist
- Exercise physiologist
- Musculoskeletal Australia
MSK Help Line: 1800 263 265

Reference

¹. Australian Institute of Health and Welfare 2016. Australia's health 2016. Australia's health series no. 15. Cat. no. AUS 199. Canberra: AIHW.

How we can help

Call our MSK Help Line and speak to our nurses.
Phone 1800 263 265 or email helpline@msk.org.au.

We can help you find out more about:

- arthritis and musculoskeletal conditions
- ways to live well with these conditions
- managing your pain
- upcoming webinars, seminars and other events.

More to explore

- Arthritis Australia and the Australian Paediatric Rheumatology Group
www.arthritisaustralia.com.au
Information sheets relating to juvenile arthritis
- Royal Children's Hospital
www.rch.org.au/rheumatology/information_about_rheumatological_conditions
Information sheets written specifically for children and young people, as well as adults
- Arthritis Ireland
www.juvenilearthritis.ie
Resources, videos and other information for kids, tweens, teens and parents
- Arthritis Foundation (USA)
www.kidsgetarthritis.org
- Better Health Channel
www.betterhealth.vic.gov.au

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