

STARTING YOUR JOURNEY

JUVENILE IDIOPATHIC ARTHRITIS

Hearing your child has been diagnosed with Juvenile Idiopathic Arthritis (JIA) is understandably a challenging and emotional experience. Some may feel overwhelmed and anxious. It is completely normal to have these feelings, however please know that you and your child are not alone in this journey.

WHAT IS JIA?

JIA is a condition where one or more joints (knees, ankles, elbows, wrists, fingers, etc) become inflamed, leading to joint pain, swelling and stiffness.

JIA affects children of any age, up to 16 years old. It is one of the most common forms of chronic disease in childhood, affecting up to 1 in 500 children. The exact cause of JIA is unknown, but it's believed to involve a combination of genetic, environmental, and immune system factors.

To understand JIA, we need to first understand the body's basic functioning. Imagine the body's joints are like hinges on a door, allowing us to move freely. The body's immune system functions as a protective "defence force," normally fighting away harmful germs to protect our cells. In children with JIA this 'defence force' becomes confused, and mistakes healthy tissue for a harmful germ, creating inflammation in areas it shouldn't, like inside the joints (hinges); this can lead to joint swelling, pain, and restriction. JIA can also cause inflammation in the eyes, which is called uveitis. Uveitis can occur without symptoms, but untreated, can lead to permanent visual impairment, so regular eye check-ups are essential.

There are multiple subtypes of JIA, including:

Oligoarticular (affecting up to 4 joints)

Polyarticular (affecting more than 4 joints)

Systemic (arthritis associated with fever +/- rash and other organ involvement)

Enthesitis-related (arthritis and/or tendon inflammation)

Psoriatic (arthritis plus dry, scaly pink rash)

Undifferentiated (arthritis which does not fit into any of the above subtypes, or overlaps between more than 1 subtype)

JIA is a chronic condition, which can be unpredictable in nature and requires consistent management by specialists, like Dr Jess, to ensure your child can get back to running, playing and experiencing the best possible health outcomes longer term.



Parent and carer information

JUVENILE IDIOPATHIC ARTHRITIS

SYMPTOMS

Common symptoms of JIA include **joint pain, swelling, and stiffness,** often accompanied by warmth around the affected areas. Children with JIA may have trouble moving their joints, which can make daily activities harder to perform.

Uveitis may cause blurry vision and eye irritation, but can also occur without symptoms. In some cases, JIA may also be associated with fever and rash.

The specific symptoms of JIA can vary depending on the subtype and the individual.

Timely diagnosis and management are essential to minimise the impact of these symptoms and promote your child's overall well-being.

TREATMENT OPTIONS

Although there is no cure for JIA, there are a wide range of effective treatments available. Treatment for JIA is tailored to your child's specific needs and may include a combination of medications, physical therapy, and pain management strategies. The goal is to control symptoms, prevent joint damage, and allow your child to lead an active life.

Commonly used medications in JIA include:

- Non-steroidal Anti-Inflammatory Drugs (NSAIDs): These medications help reduce pain and inflammation.
- **Disease Modifying Anti-Rheumatic Drugs (DMARDs)**: Conventional DMARDs (like *Methotrexate*) and biologic DMARDs suppress the immune system to control inflammation and reduce pain.
- **Corticosteroids**: These powerful anti-inflammatory drugs may be used for short-term relief during flares. They may be injected directly into an inflamed joint, given orally, or in higher doses intravenously.

Your child's management involves a team of healthcare professionals working together to support your child. Team members include a Paediatric Rheumatologist (Dr Jess), Nurse Practitioners, Ophthalmologist, Physiotherapist, Occupational Therapist, Psychologist, and General Practitioner. This team is individualised to address your child's unique needs.

Dr Jess is there to guide you, and places a strong emphasis on family-centred care which plays a crucial role in achieving positive health care outcomes.



Parent and carer information

JUVENILE IDIOPATHIC ARTHRITIS

FLARES

A JIA flare refers to a period when the inflammation in your child's joint(s) is active, which may lead to increased pain, swelling, stiffness, and discomfort. Triggers for flares are not always clear and can include factors like illness, stress, or changes in treatment.

JIA flares can vary in intensity and duration. Some may be relatively mild and short-lived, while others can be more severe and last for a longer period. Flares can be physically and emotionally exhausting so managing your child's flare is an essential part of JIA care.

The goal for early management, is to minimise the impact of the flare, reduce pain and inflammation, prevent long-term joint damage, and encourage a return to daily activities.

Regular follow-up with Dr Jess is an important part of JIA care. It can help manage fluctuations in disease by ensuring consistent treatment and disease control.

Home strategies for managing a flare:

- Commence REGULAR non-steroidal anti-inflammatory medication (e.g. Ibuprofen, Piroxicam or Naproxen), as prescribed. Do not skip doses, or only take as required for pain, as sporadic use will not be effective in managing the flare.
- Paracetamol can be used in combination with an anti-inflammatory, if required.
- You may need to modify your child's activity during a flare depending on the severity of their symptoms. It is important to maintain a level of light activity, and keep the joints moving, to maintain strength and range, and avoid joint stiffness.
- Warm compresses, showers or baths may improve joint pain and stiffness. Some children prefer cold packs over acutely painful/swollen joints. Take care to apply these packs as recommended to avoid any damage to the overlying skin.
- Update your child's school so arrangements can be made to accommodate your child during their flare. Our team are happy to liaise with your child's school as needed.
- IF YOUR CHILD'S FLARE SYMPTOMS PERSIST DESPITE 2 WEEKS OF REGULAR ANTI-INFLAMMATORY MEDICATION, PLEASE CONTACT DR JESS

If your child is acutely unwell please go straight to the Emergency Department or call 000



Parent and carer information

JUVENILE IDIOPATHIC ARTHRITIS

PROGNOSIS

The course of JIA can be unpredictable. Some children may experience mild symptoms and few or no flare-ups, while others may have more persistent or severe disease.

Treatment response varies from child to child. Approximately 50% of children with JIA experience complete remission (no further disease activity), before entering adulthood.

It's important to note there have been significant advancements in the recognition and treatment of JIA which has improved the long-term outlook for many children. With timely medical care, physical therapy, and support, many children with JIA can lead full and active lives, in line with that of their peers.

HELPFUL LINKS AND RESOURCE INFORMATION FOR JIA:

Arthritis Australia - Managing Arthritis and Children
Arthritis Australia - Juvenile Idiopathic Arthritis (JIA)

Qld Children's Hospital - Rheumatic Diseases in Children

JAFA - Juvenile Arthritis Foundation Australia

LINKS FOR SUPPORT GROUPS:







YOU ARE NOT ALONE, WE ARE ON THIS JOURNEY TOGETHER

Dr Jess & QCC Team



Parent and carer information JUVENILE IDIOPATHIC ARTHRITIS

REFERENCE LIST FOR JIA HANDOUT:

Angeles-Han, S. T., Ringold, S., Beukelman, T., Lovell, D., Cuello, C. A., Becker, M. L., Colbert, R. A., Feldman, B. M., Holland, G. N., Ferguson, P. J., Gewanter, H., Guzman, J., Horonjeff, J., Nigrovic, P. A., Ombrello, M. J., Passo, M. H., Stoll, M. L., Rabinovich, C. E., Sen, H. N., Reston, J. (2019). 2019 American College of Rheumatology/Arthritis Foundation Guideline for the Screening, Monitoring, and Treatment of Juvenile Idiopathic Arthritis—Associated Uveitis. Arthritis Care & Research, 71(6), 703-716. https://doi.org/10.1002/acr.23871

Australian Rheumatology Association. (2023). Paediatric Condition Information. Australian Rheumatology Association. https://rheumatology.org.au/For-Patients/Paediatric-Condition-Information

ArthritisAustralia. (2017a). Children and arthritis. Arthritis Australia. https://arthritisaustralia.com.au/managing-arthritis/arthritis-and-children/

ArthritisAustralia. (2017b). Managing JIA. Arthritis Australia. https://arthritisaustralia.com.au/managing-arthritis/arthritis-and-children/managing_jia/

ArthritisAustralia. (2017c). Practical tips for JIA. Arthritis Australia https://arthritisaustralia.com.au/managing-arthritis/arthritis-and-children/practical-tips-for-jia/

Bansal, N., Pasricha, C., Kumari, P., Jangra, S., Kaur, R., & Singh, R. (2023). A comprehensive overview of juvenile idiopathic arthritis: From pathophysiology to management. Autoimmunity Reviews, 22(7), 103337. https://doi.org/10.1016/j.autrev.2023.103337

Martini, A., Lovell, D. J., Albani, S., Brunner, H. I., Hyrich, K. L., Thompson, S. D., & Ruperto, N. (2022). Juvenile idiopathic arthritis. Nature Reviews Disease Primers, 8(1), 5. https://doi.org/10.1038/s41572-021-00332-8 PRINTO. (2016). Juvenile Idiopathic Arthritis. Paediatric Rheumatology Network. https://www.printo.it/pediatric-rheumatology/IE/info/pdf/2/1/Juvenile-Idiopathic-Arthritis

QHealth. (2022). Rheumatic diseases in children. Queensland Children's Health https://www.childrens.health.qld.gov.au/fact-sheet-rheumatic-diseases-in-children/

Saurenmann, R. K., Levin, A. V., Feldman, B. M., Rose, J. B., Laxer, R. M., Schneider, R., & Silverman, E. D. (2007). Prevalence, risk factors, and outcome of uveitis in juvenile idiopathic arthritis: A long-term followup study. Arthritis & Rheumatism, 56(2), 647-657. https://doi.org/10.1002/art.22381

Sen, E. S., & Ramanan, A. V. (2020). Juvenile idiopathic arthritis-associated uveitis. Clinical Immunology, 211, 108322.

https://doi.org/https://doi.org/10.1016/j.clim.2019.108322

Zaripova, L. N., Midgley, A., Christmas, S. E., Beresford, M. W., Baildam, E. M., & Oldershaw, R. A. (2021). Juvenile idiopathic arthritis: from aetiopathogenesis to therapeutic approaches. Pediatric Rheumatology, 19(1), 135. https://doi.org/10.1186/s12969-021-00629-8