

# Idaho Falls Pediatrics

## Juvenile Rheumatoid Arthritis

### What is juvenile rheumatoid arthritis?

Juvenile rheumatoid arthritis (JRA) is the most common form of arthritis in children. As many as half of the children with this condition have a mild form and have few problems. However, some forms of this disease can produce long-term problems. JRA may also be called juvenile idiopathic arthritis (JIA).

There are three types of JRA:

- **Pauciarticular JRA** affects 4 or fewer joints and may cause inflammation of the eye. The joints most likely to be affected are the knees, elbows, wrists, or ankles. This is the most common type of JRA. Half of the children with JRA have this type.
- **Polyarticular JRA** affects many joints (5 or more). About 30% of children with JRA have this type. The smaller joints like those in the hands and feet may be affected as well as large joints.
- **Systemic Onset JRA** (also called Still's disease) affects many body parts, including joints and internal organs (such as the heart, liver, spleen, and lymph nodes). Only about 20% of children with JRA have this type. It often begins with bouts of fever and chills as well as a light pink rash on the thighs and chest.

### What is the cause?

The cause of JRA is not completely known. Research shows that it is an autoimmune disease. In an autoimmune disease, your body loses the ability to tell the difference between healthy cells and harmful invaders, such as bacteria and viruses. Instead of protecting your body, your immune system releases chemicals that damage healthy tissues and cause swelling and pain.

### What are the symptoms?

Juvenile rheumatoid arthritis has similar symptoms to the adult forms of arthritis such as pain, swelling, stiffness, and loss of motion to joints. When the arthritis starts and how severe the symptoms are varies among the different types of JRA. As with adult-onset disease, JRA may flare and then settle into remission.

A growing child with juvenile rheumatoid arthritis may have abnormal bone growth. Also, if a child keeps a joint from moving to avoid pain, this lack of movement can weaken and shorten muscles, causing a deformity over time.

### **How is it diagnosed?**

Your health care provider may suspect JRA if your child has been complaining of joint pain and stiffness for more than 6 weeks. Tests that may be ordered depending on the symptoms. Your health care provider may do tests that check for inflammation or autoimmunity (an "ANA" test). Some children also have a rheumatoid factor test.

### **How long does it last?**

The outlook for juvenile rheumatoid arthritis is often better than that for an adult with arthritis. About half of children affected by JRA recover completely and outgrow the arthritis by adulthood. Eye problems may continue for some children even if their joint symptoms have gone away. Joint problems can sometimes return after long periods without them. The fewer the number of joints affected, the better the outlook.

A small percentage of children with systemic onset JRA develop severe arthritis in many joints that can continue to adulthood.

### **What is the treatment?**

- **Medicine:** There are many medications for JRA that reduce swelling and pain. Many children with JRA take non-steroidal anti-inflammatory agents (NSAIDs). Ibuprofen and naproxen are two NSAIDs. Some children have side effects from these medicines, such as abdominal pain, anemia, nausea, headache, blood in the urine, or swelling of the hands or feet.

Corticosteroids may be used to reduce severe pain and swelling. These medicines are effective, but can have serious side effects, such as interfering with normal growth.

Disease-modifying antirheumatic drugs (DMARDs) may be used if rest, exercise, use of NSAIDs, and physical therapy do not work. However, there are some problems with DMARDs. They may take 2 to 6 months to start working. They may cause serious side effects on blood cells, eyes, kidney, or liver.

A new class of medicines that block a protein (called "TNF") is used to treat some children with severe JRA. These medicines are antibodies and are given by injection. Some children have had serious side effects while using these medicines.

Discuss the risks and benefits of immunosuppressive and corticosteroid medicines with your health care provider. A pharmacist may provide helpful information about all of these medicines.

- **Eye exams:** Regular eye exams by an eye doctor are important for all children with JRA. Take your child to the eye doctor once a year.
- **Dental care:** Medications for JRA may affect your child's bones and teeth. Take your child to the dentist every 6 months to check on the health of the teeth, gums, and jaw.
- **Nutrition:** Give your child a well-balanced diet. Your child should try to maintain an average weight.
- **Exercise:** Make sure your child gets regular exercise. Doing a variety of exercise activities (including range-of-motion exercises) is important because lack of movement can weaken and shorten muscles. A balance between normal activity and rest is necessary. This will avoid fatigue and excessive stress on joints. A physical therapist can help find the right amount of activity for your child.
- **Splints:** If joints are being pulled out of their usual alignment, a splint may help to keep the normal position and function.

\*NOTE: This information is provided as a public educational service. The information does not replace any of the instructions your physician gives you. If you have a medical emergency please call 911 or call the Hospital at (208) 529-6111. If you have questions about your child's care, please call Idaho Falls Pediatrics at (208) 522-4600.