

# JUVENILE RHEUMATOID ARTHRITIS

## WHAT IS JUVENILE RHEUMATOID ARTHRITIS?

Juvenile rheumatoid arthritis (JRA) is a chronic condition that causes joint swelling and stiffness for more than six consecutive weeks in a child 16 years of age or less. About 285,000 children in the United States have juvenile arthritis, and about 100,000 have juvenile rheumatoid arthritis.

There are three types of JRA:

- **Pauciarticular**– Affects four or fewer joints and usually the larger joints such as the knees. This is the most common form of JRA, and about half of all children with JRA have this type. Children with this type of arthritis often outgrow the illness.
- **Polyarticular**–Involves more than five joints and usually affects the smaller joints of the hands and feet. About 30 percent of all children with JRA have this type. These children often have a more severe form of the disease, which doctors consider to be the same as adult rheumatoid arthritis.
- **Systemic**– Begins with very high fevers as well as a skin rash and joint swelling. About 20 percent of all children with JRA have this type. It may also affect the internal organs such as the heart, liver, spleen and lymph nodes. This type of arthritis may be severe and continue into adulthood.

## WHAT CAUSES JRA?

The cause of JRA is unknown. It is a disease in which the immune system begins to attack healthy cells and tissues. It is possible that the child's genetic makeup contributes to a tendency for developing JRA, and then an environmental factor (such as an infection or virus) triggers the onset of JRA.

## WHO IS AT RISK?

Children can develop JRA as early as infancy, but it occurs most frequently in the toddler to teen years. Girls develop JRA more frequently than boys.

In some families, inherited factors play a role in a person's risk for developing arthritis. If a parent or other close relative has been diagnosed with arthritis, it is important to share this history with a health care provider. Early diagnosis and treatment is the key to successful management of arthritis.

## HOW IS IT DIAGNOSED?

There is no single test that can be used to diagnose JRA. A doctor diagnoses JRA by examining the child and considering the child's medical history. Doctors usually suspect JRA, along with other possible conditions, when they see a child with persistent pain or joint swelling, unexplained rashes and fever, swelling of the lymph nodes or inflammation of internal organs. Blood tests can be used to rule out other causes.

## HOW IS IT TREATED?

Early diagnosis is very important. Goals of treatment are to control swelling, relieve pain, prevent/control joint damage and maintain functional abilities. Treatments may include medications, exercise, eye and dental care, and diet. There are several medications that are commonly prescribed to treat JRA. *Non-steroidal anti-inflammatory drugs (NSAIDs)*, such as aspirin or ibuprofen, often are used to reduce pain and swelling. *Disease modifying anti-rheumatoid drugs (DMARDs)*, such as hydroxychloroquine, oral and injectable gold, sulfasalazine or methotrexate, often are used to slow the progress of the disease but may take weeks or months to relieve symptoms. *Corticosteroids*, such as prednisone, may be needed to control severe symptoms. Corticosteroids have several side effects including interfering with a child's normal growth.

Successfully dealing with arthritis pain and disability requires *self-management* skills. Caregivers can help children with JRA learn the following self-management techniques which can help to limit the effects of the disease: arthritis education, exercise programs, rest, relaxation and stress management, eating well-balanced meals and maintaining proper weight, taking care of joints and using assistive devices to rest joints and relieve pressure.

- **Exercise** can help increase independence, improve mood, decrease pain, increase flexibility, improve blood flow, maintain proper weight and promote general physical fitness. Exercise in a warm water pool is an excellent choice. Physical/ occupational therapy can help restore joint movement and increase strength. A therapist can help design an exercise program to meet a person's specific needs.
- **Rest** also is important. Arthritis may cause tiredness and muscle weakness. A rest or short nap that does not interfere with nighttime sleep may help. Relaxation techniques can be useful in controlling pain. Some people find stress reduction and biofeedback helpful.
- **Assistive devices** can be used to reduce stress on certain joints. For example, braces or canes may help reduce stress on the knees. Jar grippers or other gadgets may help reduce stress on the small joints of the hands.

## WHEN SHOULD A PERSON GET HELP?

If a child has joint swelling, stiffness or pain, limps for no obvious reason or has a fever that persists for two or three days, he or she should be seen by a doctor. Once a child has been diagnosed with JRA, regular doctor visits are necessary to monitor the disease and the treatment plan. Children with JRA also should have an eye examination to screen for inflammation every three to six months.

A child's health care team may consist of a pediatric rheumatologist (doctor who specializes in treating children with arthritis), a physical therapist, an occupational therapist and a social worker who have knowledge and experience in working with children with arthritis. They can coordinate care with the child's school and the child's pediatrician as well as other physicians such as eye doctors, orthopedic (bone) doctors and adult rheumatologists.