RHEUMATOID ARTHRITIS

Rheumatoid arthritis (**RA**) is a chronic systemic inflammatory disorder that primarily affects joints. The cause of RA is not yet fully understood, It has been hypothesized that an abnormal response of the immune system plays a leading role in the inflammation and joint damage that occurs

Along with joint inflammation and pain, which can lead to loss of function. Many people experience fatigue, loss of appetite and a low-grade fever. In systemic onset disease The disease may also have signs and symptoms in organs other than joints.

The process involves inflammation and fibrosis of the capsule around the joint. It also affects the underlying bone and cartilage.

Systemic onset RA can produce diffuse inflammation in the lungs, the membrane around the heart, the membranes of the lungs, changes in eyes. It can also produce nodular lesions, most common within the skin.

Diagnosis

Mostly on the basis of symptoms and physical examination.

Clinical examination

To diagnose rheumatoid arthritis, the doctor will take a detailed medical history and conduct a thorough physical examination. X-rays or blood tests are required to exclude other conditions that can produce similar symptoms.

Biochemical examination

- CBC (complete blood count)
- Erythrocyte sedimentation rate
- Blood culture. This can be done to rule out infections.
- Bone marrow examination. To rule out conditions such as leukemia.
- Rheumatoid factor. An antibody produced in the blood of children with some forms of JRA. But it's much more commonly found in adults with rheumatoid arthritis.
- ANA (antinuclear antibody), a blood test to detect autoimmunity. It's also useful in predicting which children are likely to have eye disease with JRA.
- A bone scan, to detect changes in bone and joints to evaluate the causes of unexplained bone and joint pain.

Treating Rheumatoid Arthritis

The treatment of RA is best undertaken by an experienced team of health professionals, including paediatric rheumatologists, ophthalmologists, dentists, orthopaedic surgeons, school nurses and teachers, careers advisors and, of course local general practitioners, paediatricians and rheumatologists.

It is essential that every effort is made to involve the affected child and their family in disease education and balanced treatment decisions.

The goals of treatment are to relieve pain and inflammation, slow down or prevent the destruction of joints, and restore use and function of the joints to promote optimal growth, physical activity, and social and emotional development in your child.

Medications

There have been very beneficial advances in drug treatment over the last 20 years. Most children are treated with <u>non-steroidal anti-inflammatory drugs</u> and intra-articular <u>corticosteroid</u> injections. <u>Methotrexate</u> is a powerful drug which helps suppress joint inflammation in the majority of JIA patients with polyarthritis and systemic arthritis. Newer drugs have been developed recently, such as <u>TNF alpha blockers</u>, which appear to be effective in severe JIA. There is little or no controlled evidence to support the use of alternative remedies such as specific dietary exclusions, homeopathic treatment or acupuncture.

Physical Therapy

An appropriate physical therapy program is essential in the management of any type of arthritis. A physical therapist will explain the importance of certain activities and recommend exercises suited to your child's specific condition. The therapist may recommend range-of-motion exercises to restore flexibility in stiff, sore joints and other exercises to help build strength and endurance.

Regular Exercise

When pain strikes, it's natural for your child to want to sit still. But it's important to maintain a regular exercise program. Muscles must be kept strong and healthy so they can help support and protect joints. Regular exercise also helps to maintain range of motion.

At home and at school, your child should maintain regular exercise and physical fitness programs. Safe activities include walking, swimming, and bicycling (especially on indoor

stationary bikes). Always be certain your child warms up the muscles through stretching before exercising. Making exercise a family activity can increase the level of fun and enthusiasm.

