pauciarticular JRA exist: early onset and late onset.[9,19,62] Early-onset pauciarticular JRA occurs before age 5 years and usually affects girls. When left untreated, early-onset pauciarticular JRA can result in iridocyclitis, which can lead to visual impairments.[9,19,62] The second subtype, late-onset pauciarticular JRA, occurs between ages 10 and 12 years and is more common in boys. This subtype affects large weight-bearing joints and entheses (insertion point of tendon into bone).[62] These children often have spinal involvement that may develop into a spondyloarthropathy.[19,62]

Polyarticular JRA is synovitis in more than four joints and is more common in girls.[9,19,62] It usually manifests with symmetric involvement of the small joints of the hands or feet, wrists, elbows, shoulders, knees, hips, ankles, cervical spine, and temporomandibular joints.[19,62] Bursitis and tendinitis can occur because tendons and bursae also are lined with synovial tissue. In contrast to pauciarticular JRA, polyarticular JRA can have systemic features, including low-grade fever, anemia, leukocytosis, mild hepatosplenomegaly, and lymphadenopathy.[62]

The last type of JRA is systemic JRA (Still's disease), which can occur at any age and does not favor girls or boys.[19,62] Systemic JRA is characterized by a rash, synovitis in one or more joints, and an intermittent high-grade fever.[9,19,62] The fever usually occurs in the afternoon and evening and abates when the child feels better.[19,62] Because fever can precede all other symptoms, these children are often initially evaluated for fever of unknown origin.[62] The rash usually appears with the fever and is salmon pink, is 2 to 5 mm in diameter, and has an erythematous perimeter.[62] Other signs and symptoms of systemic JRA include **malaise,** irritability, anemia, hepatitis, peptic ulcer disease, leukocytosis, thrombocytosis, lymphadenopathy, hepatomegaly, splenomegaly, pericarditis, and pleuritis.[19,62]

Management of Juvenile Rheumatoid Arthritis

Management for children with JRA involves a combination of medication, physical therapy, and occupational therapy. The main objectives of therapy should be to control pain and inflammation, promote mobility, and improve function.[19,62] Control of pain and inflammation is usually obtained with NSAIDs, which have been shown to decrease stiffness, pain, and swelling in children with JRA. Other medications used with JRA are corticosteroids, DMARDs, infliximab, and immunosuppressants.[19,62] ROM is the strongest indicator of functional disability in children with systemic JRA.[19] All joints should be gently put through the full ROM twice a day to maintain good mobility.[62] Heat can be used before stretching to help warm the muscles and decrease pain before stretching. Gentle splinting can also be used to help maintain ROM.[62] Aquatic therapy is an appropriate management for JRA because the heat can help relax the muscles and decrease pain.[62] Although patients with JRA are children, education in joint protection and energy conservation is still important. The therapist should always try to make the exercise program fun, interesting, and interactive to keep the child involved.[62]

SEPTIC ARTHRITIS

Septic arthritis is the invasion of a joint by an infectious agent causing arthritis. Septic arthritis usually occurs from a bacterial infection, but the infection can be viral, mycobacterial, or fungal. Bacteria are introduced into the joint by the bloodstream from an infection elsewhere or from direct penetration after a wound, surgery, or local infection.[58] Two common types of septic arthritis are gonococcal and nongonococcal.[27,58]

Gonococcal Arthritis

Gonococcal arthritis usually occurs in healthy individuals and is two to three times more common in women.[27,58] Initially, the patient experiences 1 to 4 days of noninflammatory joint pain in the wrist, ankle, knee, and elbow. Chronic arthritis and tendinitis are common symptoms preceding gonococcal arthritis.[58] Patients tend to have characteristic asymptomatic skin lesions with 2 to 10 small necrotic pustules over the extremities, especially the palms and soles.[27]

Management of Gonococcal Arthritis. Gonococcal arthritis usually responds well to drug therapy in 24 to 48 hours and is not as destructive as nongonococcal bacterial infections.[27,58]

Nongonococcal Arthritis

Nongonococcal bacterial infections are primarily monarticular and occur in large weight-bearing joints and wrists.[27,58] Individuals with previous joint damage from a disease such as RA and intravenous drug users have an increased risk of infection.[27,58] *Staphylococcus aureus* is the most common cause of nongonococcal septic arthritis.[27,58] Nongonococcal septic arthritis is marked by a sudden onset of acute arthritis with pain, swelling, and heat in one joint.[27] The hip, wrist, shoulder, and ankle all can be affected, but the knee is most commonly affected. Chills and fever often accompany the symptoms of nongonococcal septic arthritis.[27]

Management of Nongonococcal Arthritis. Management should be initiated quickly with systemic antibiotics addressing the causative organism. If the specific organism cannot be determined, bacterial antibiotics are recommended.[27] Aspiration of the affected joint keeps the joint free of destructive exudates.[27,58] Early intervention is important because ankylosis and articular damage can occur if management is delayed. Immobilization and heat can help decrease joint pain.[27] Rest, elevation, and immobilization are used during the acute phase of the disease.

As stated previously, early diagnosis and management are important because of the potential for harm if septic arthritis is untreated.[58] Risk factors to keep in mind are infection elsewhere in the body, very old or young age, presence of other systemic diseases, recent joint aspiration or surgery, prosthetic joints, immunosuppression, and intravenous drug abuse.[19,58] An infected joint is painful and tender and has limited motion but may not have redness, heat, and swelling, especially if treatment includes immunosuppressants.[58] Gentle passive and active ROM