As with pulmonary TB, the index case should be located. A family and environmental history needs to be obtained and tuberculin skin tests (TSTs) performed. Results of TSTs are positive for the majority of children with tuberculous arthritis; however, the results are not diagnostic, and the clinical and laboratory features do not differentiate tubercular arthritis from a nontubercular septic arthritis. Diagnosis requires isolation of *Mycobacterium tuberculosis* from the site. Patients with the susceptible organism start treatment with combined antituberculosis chemotherapy (isoniazid, rifampin, and pyrazinamide); directly observed therapy (DOT) is preferred.

## **Nursing Care Management**

Nursing care depends on the site and extent of infection. Tuberculous spondylitis and hip infection may require immobilization, casting, and surgical fusion. Nursing care is individualized but is generally the same as for osteomyelitis and septic arthritis.

## **Disorders of Joints**

## **Juvenile Idiopathic Arthritis**

Juvenile idiopathic arthritis (JIA) refers to chronic childhood arthritis. A group of heterogeneous autoimmune diseases, JIA causes inflammation in the joint synovium and surrounding tissue. The cause of JIA is unknown. JIA starts before 16 years old with a peak onset between 1 and 3 years old. Twice as many girls as boys are affected. The reported incidence of chronic childhood arthritis varies from 1 to 20 cases per 100,000 children with a prevalence of 10 to 400 per 100,000 (Cassidy and Petty, 2011). Genetic factors and environmental triggers (e.g., rubella, Epstein-Barr virus, parvovirus B19) have been associated with the onset of JIA, but the etiology remains unclear.

## **Pathophysiology**

The disease process is characterized by chronic inflammation of the synovium with joint effusion and eventual erosion, destruction, and fibrosis of the articular cartilage. Adhesions between joint surfaces