some evidence for their participation in PsA. Interferon γ, TNF, and IL-1β, 2, 6, 8, 10, 12, 13, 15, and 17A, and myeloid-related protein (S100A8/A9) are found in PsA synovium or synovial fluid. IL-23/17 pathway cytokines are critical drivers of PsA pathogenesis. Both T_H17 cells and type 3 innate lymphocytes (ILC3) have been identified in dermal extracts of psoriatic lesions and in synovial fluid of PsA patients. Consistent with the extensive bone remodeling in PsA, patients with PsA have been found to have a marked increase in osteoclastic precursors in peripheral blood and upregulation of receptor activator of nuclear factor κB ligand (RANKL) in the synovial lining layer. Increased serum levels of TNF, RANKL, leptin, and omentin positively correlate with these osteoclastic precursors.

■ CLINICAL FEATURES

In 70% of cases, psoriasis precedes joint disease. In 15% of cases, the two manifestations appear within 1 year of each other. In about 15% of cases, the arthritis precedes the onset of psoriasis and can present a diagnostic challenge. The frequency in men and women is almost equal, although the frequency of disease patterns differs somewhat in the two sexes. The disease can begin in childhood or late in life but typically begins in the fourth or fifth decade, at an average age of 37 years.

Many classification schemes have been proposed for the broad spectrum of arthropathy in PsA. Wright and Moll described five patterns: (1) arthritis of the DIP joints; (2) asymmetric oligoarthritis; (3) symmetric polyarthritis similar to RA; (4) axial involvement (spine and sacroiliac joints); and (5) arthritis mutilans, a highly destructive form of the disease. These patterns frequently coexist, and the pattern that persists chronically often differs from that of the initial presentation. A simpler scheme in recent use contains three patterns: oligoarthritis, polyarthritis, and axial arthritis.

Nail changes in the fingers or toes occur in most patients with PsA, compared with only a minority of psoriatic patients without arthritis, and pustular psoriasis is said to be associated with more severe arthritis. Dactylitis and enthesitis are common in PsA and help to distinguish it from other joint disorders. Dactylitis occurs in >30%; enthesitis and tenosynovitis are probably present in most