Specific Clinical Features of Spondyloarthritis

Ankylosing Spondylitis

The cardinal clinical feature of ankylosing spondylitis is inflammatory spine pain. Over time, spine involvement ascends from the sacroiliac joints to involve all levels of the spine. Progressive loss of motion results from ankylosis of the vertebral column and apophyseal joints. Costovertebral involvement leads to decreased chest expansion and restrictive lung physiology.

Loss of mobility and secondary osteoporosis of the vertebral bodies increase the risk of traumatic spine fracture. Axial involvement of the shoulders and hips is common and associated with a worse prognosis. Peripheral oligoarthritis, enthesitis, and dactylitis are more common in females. Diagnosis requires demonstration of radiographic sacroiliitis (i.e., sacroiliac joint erosions, sclerosis, and ankylosis). Anterior uveitis is common. Aortitis, upper lobe pulmonary fibrosis, cauda equina syndrome, and amyloidosis are less common and seen in late disease.

Reactive Arthritis

Among the unique clinical features of reactive arthritis are urethritis, conjunctivitis, and certain dermatologic problems (Fig. 78-1). The urethritis may result from the chlamydial infection that triggers the disease, or it may be a sterile inflammatory discharge seen in diarrhea-associated disease. Conjunctivitis may be mild in reactive arthritis and is distinct from uveitis.

Keratoderma blennorrhagicum is a distinct papulosquamous rash usually found on the palms or soles. Circinate balanitis is a rash that may appear on the penile glans or shaft of men with reactive arthritis. Nonpitting nail thickening and oral ulcers may also occur in patients with reactive arthritis. These lesions can be confused with similar findings in patients with psoriasis and inflammatory bowel disease, respectively.

Most cases are self-limited. Chronic or relapsing arthritis and chronic spondylitis are associated with HLA-B27 and *Chlamydia* infection.

Psoriatic Arthritis

Five identifiable clinical patterns of psoriatic arthritis are recognized: distal interphalangeal joint involvement with nail pitting; asymmetrical oligoarthropathy of large and small joints; arthritis mutilans, a severe, destructive arthritis; symmetrical polyarthritis, which is identical to rheumatoid arthritis; and predominately axial disease. These patterns are not exclusive, and clinical overlap is significant.

Spondylitis or sacroiliitis may occur along with any of the other patterns. The prevalence of HLA-B27 is increased among the patients with spondylitis or sacroiliitis but not among patients with the other patterns. Psoriatic skin or nail disease predates arthritis in most cases, but both may occur concomitantly, or joint disease may precede skin involvement. Rarely, joint disease indistinguishable from psoriatic arthritis, which can occur in patients with a family history but no personal history of psoriatic skin disease.

Enteropathic Arthritis: Inflammatory Bowel Disease

Crohn's disease and ulcerative colitis (see Chapter 38) are frequently associated with inflammatory spine disease and peripheral arthritis. The peripheral arthritis is typically nonerosive, oligoarticular, and episodic, and the degree of joint involvement fluctuates with gut activity. A more chronic, symmetrical polyarthritis may occur in patients with Crohn's disease.

DIAGNOSIS AND DIFFERENTIAL DIAGNOSIS

The diagnosis of spondylarthritis remains a clinical diagnosis made by identifying typical history and physical examination phenomena, analyzing selected laboratory tests, and using musculoskeletal imaging. The diagnosis is suggested by inflammatory spine pain or chronic lower extremity asymmetric inflammatory oligoarthritis in two to four joints. In this setting, features that increase the probability of spondyloarthritis include uveitis, psoriasis, enthesitis, dactylitis, inflammatory bowel disease, family history of spondylarthropathy, elevated C-reactive protein (CRP) level, HLA-B27, preceding gastrointestinal or genitourinary infection, and sacroiliitis on radiography, computed tomography (CT), or magnetic resonance imaging MRI).

Differentiating spondyloarthritis from other inflammatory or degenerative joint or spine diseases can be challenging. Crystalline arthropathies can manifest with peripheral oligoarthritis, often in the lower extremities. However, the spine is rarely

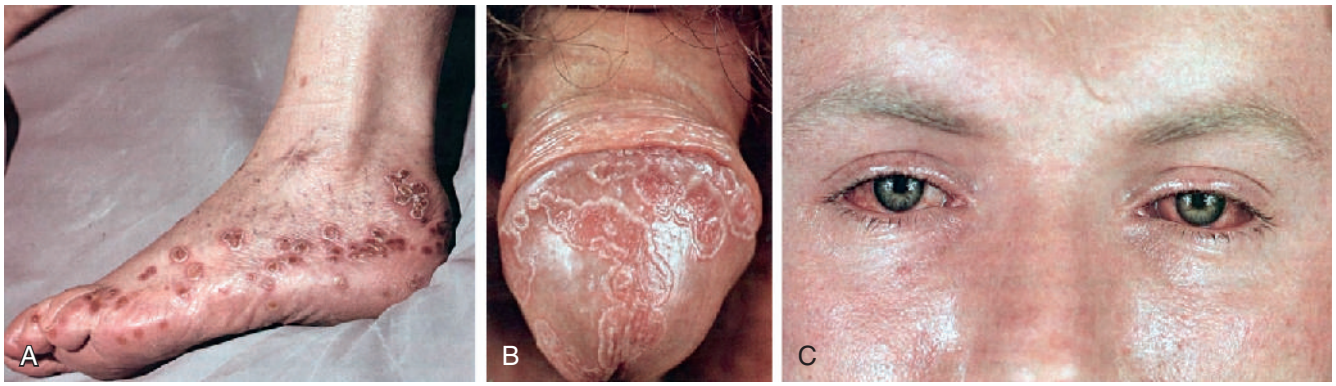

FIGURE 78-1 Reactive arthritis. **A,** Keratoderma blennorrhagicum. Red to brown papules, vesicles, and pustules with central erosion show characteristic crusting and peripheral scaling on the dorsolateral and plantar foot. **B,** Balanitis circinata. Moist, well-demarcated erosions with a slightly raised micropustular circinate border on the glans penis. **C,** Bilateral conjunctivitis associated with anterior uveitis. (From Fitzpatrick TB, Johnson RA, Wolff K, et al: Color atlas and synopsis of clinical dermatology, ed 3, New York, 1983, McGraw-Hill, pp 393, 395.)