Introduction

Conjunctivitis (most common), uveitis (second most common), episcleritis, scleritis, keratitis, optic neuritis, glaucoma, and retinal vasculitis are among the ophthalmologic manifestations of reactive arthritis. Symptoms of conjunctivitis include injected dry eyes with or without pain, edema, and purulent discharge. Symptoms of uveitis include pain, photophobia, vision impairment, scleral injection, and hypopyon. Dermatologic manifestations These are less common, and include hyperkeratotic lesions on palms and soles, mucocutaneous lesions in the oral cavity and genitalia, and/or nail dystrophy. Reactive arthritis rarely is associated with visceral involvement. It can present as cardiac conduction abnormalities in early disease and aortic insufficiency in late disease. It also has been associated with myelopathy and neurologic manifestations. In addition, patients with reactive arthritis may have gastrointestinal complications such as diarrhea and colitis.

Causes

To date, there is no agreement on diagnostic criteria for reactive arthritis. The condition is classified as a seronegative spondyloarthropathy because patients have historically tested negative for rheumatoid factor. Similar to other spondyloarthropathies (such as psoriatic arthritis and ankylosing spondylitis), reactive arthritis is characterized by arthritis of the axial skeleton, enthesitis, asymmetric oligoarthritis, or symmetric polyarthritis of peripheral joints, and absence of rheumatoid factor. More specifically, reactive arthritis is classically recognized as the triad of conjunctivitis, peripheral arthritis, and urethritis or cervicitis and often is remembered by the adage: “Can’t see, can’t pee, and can’t climb a tree.”

Diagnosis

The combination of elevated CRP, genitourinary symptoms, metatarsophalangeal joint involvement, and HLA-B27 involvement has been estimated to be predictive of reactive arthritis with 69% sensitivity and 93.5% specificity.

Laboratory testing can be of great value to the diagnosis of reactive arthritis, but it also can present some difficulties. This is due to factors such as delays in culturing infectious fluids, a failure to isolate infectious organisms during arthrocentesis, and a lack of specific serologic tests for some of the causative agents. Laboratory testing of the inflammatory markers erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) also can be quite helpful in the diagnosis of reactive arthritis, especially in the acute phase. However, the absence of elevated inflammatory markers does not rule out reactive arthritis. Septic arthritis can present similarly to reactive arthritis. Septic arthritis is monoarticular and can be distinguished from reactive arthritis with synovial fluid and Gram stain analysis. Synovial fluid analysis also can help differentiate gout from reactive arthritis. In gout, crystals will be present on synovial fluid analysis and patients may have uric acid tophi.