TABLE 24-1 Differential Diagnosis between Rheumatoid Arthritis and Osteoarthritis

Characteristic	RA	OA
Joints affected	Any joint but more frequently wrists, hands, elbows, shoulders, knees, ankles	DIP > PIP CMC Spine Hip Knee
Age	Any age; most common ages 20-60 years	More common >40 years
Gender	More common in women	More common in men <45 years and women >45 years
Relative severity	More than OA	Less than RA
Disease pathogenesis	Autoimmune: immune system attacks body	Condition of wear and tear with aging or injury and chemical factors
Joint involvement	Symmetric	Asymmetric
Joint destruction	From inflammation	From biomechanical stress
Deformities	Swan neck MP joint ulnar deviation Wrist subluxation Boutonnière deformity	Heberden's nodes Bouchard's nodes CMC joint instability
Erythrocyte sedimentation rate	Markedly increased	Mild increase
Connective tissue flexibility	Increased	Decreased
Morning stiffness	>1 hour	<30 minutes
Rheumatoid factor	Positive in 70%	Negative
Imaging	Juxtaarticular osteoporosis, erosions	Osteophytes Eburnation Reduced joint space
Management	Physical therapy/occupational therapy NSAIDs Gold Penicillamine Many new biologics	Acetaminophen Weight loss Joint replacement Exercise
NSAID response	Usually some relief	Variable relief

CMC, carpometacarpal; *DIP,* distal interphalangeal; *MP,* metacarpophalangeal; *NSAID,* nonsteroidal antiinflammatory drug; *OA,* osteoarthritis; *PIP,* proximal interphalangeal; RA, rheumatoid arthritis.

exercise that causes pain longer than 1 hour after exercise should be eliminated.[27]

The current management approach with medication is to start early with disease-modifying antirheumatic drugs (DMARDs) because they have been shown to slow RA progression. Nonsteroidal antiinflammatory drugs (NSAIDs) are the most commonly used drugs to decrease pain and swelling and increase ROM. Corticosteroids are also used for swelling, pain, and fatigue and tend to decrease symptoms faster. Biologic response modifiers block cytokines decreasing the breakdown of cartilage and bone.[20,21,33] The pathophysiology of these drugs will be explained in greater detail later.

Important Concept

For those with RA, it is very important to use management based on the phase of exacerbation that the patient is presently in.

REACTIVE ARTHRITIS

Reactive arthritis, or Reiter's syndrome, most commonly manifests as an abrupt onset of arthritis in young men who present with the triad of conjunctivitis, urethritis, and oligoarticular arthritis.[9,25,27] Conjunctivitis, also known as *pinkeye,* is inflammation of the conjunctiva (outermost layer of eye and inner surface of eyelid). Urethritis is inflammation of the urethra and manifests as painful urination. Oligoarthritis is a form of arthritis with inflammation in two to four joints. Reiter's syndrome usually manifests within days or weeks of a dysenteric or sexually transmitted infection.[25,27] The arthritis is usually asymmetric and initially involves the weight-bearing joints, such as the toes, ankles, and knees, then ascends to the axial skeleton and upper extremities.[9,25,27] Other symptoms that occur with Reiter's syndrome are oral ulcers, penile lesions, keratoderma blennorrhagicum, and plantar heel pain.[9,27] Approximately 80% of individuals with Reiter's syndrome are positive for human leukocyte antigen B27 (HLA-B27).[9,27] The HLA system is the name of the major histocompatibility complex in humans. The major HLA antigens are essential elements in immune function. Sacroiliitis is observed in about 60% of patients with chronic Reiter's syndrome. Management of Reiter's syndrome includes NSAIDs and physical therapy.