

AAP BRS podcast: High-Yield Arthritides

Rheumatoid Arthritis

What is it?	An autoimmune condition that causes inflammation in joints and can lead to the degeneration of articular surfaces.
How does it present?	Early morning stiffness that continues throughout the morning and will typically improve with gentle activity and throughout the day .
Synovial fluid analysis shows:	Can show leukocytosis , WBC > 500 mm³ . Cloudy & yellow.
How can we treat it?	<ul style="list-style-type: none">• Conservative treatment (physical therapy and non-opioid pain management)• Corticosteroids• DMARDs (methotrexate, hydroxychloroquine, azathioprine, etc.)
What are some complications?	<ul style="list-style-type: none">• Atlantoaxial subluxation, swan neck and boutonniere deformity, <i>asymmetric joint involvement</i>• Extra-articular manifestations: Fatigue, malaise, leukopenia, splenomegaly, nodules, vascular lesions, Felty syndrome (splenomegaly + neutropenia)

Osteoarthritis

What is it?	A non-erosive and non-inflammatory process of cartilage degeneration.
Risk factors include:	Older age , female, genetic predisposition, obesity .
Synovial fluid analysis shows:	Non-inflammatory , showing WBC <2000 mm³
How does it present?	Pain that gradually gets worse throughout the day, that typically worsens with excessive activity
How can we treat it?	<ul style="list-style-type: none">• Conservative treatment (physical therapy, weight loss and non-opioid pain medications such as acetaminophen and NSAIDs)• Potential use of corticosteroid injections• PRP and bone marrow derived stem cell injections

Juvenile Idiopathic Arthritis

What is it?	Arthritis that lasts ≥6 weeks with onset before 16 years of age.
How does it present?	Daily high fevers, evanescent salmon-pink rash , HSM, lymphadenopathy, heart/lung/liver involvement.
What should I know about it?	There are multiple types, including polyarticular , oligoarticular , and systemic forms , delineated by the amount of involvement and rate of progression. Poor outcome is associated with delay in diagnosis, later age of onset and longer duration of disease. Remission occurs in up to 2/3 of children .
What are some long-term complications?	Leg-length discrepancy needing special shoes or operation, contractures , growth problems, and uveitis if ANA+.
How can we manage it?	<ul style="list-style-type: none">• Activity• NSAIDs (naproxen)• DMARDs (methotrexate) and steroid joint injections