

**#MADEEASY**



**PSORIATIC  
ARTHRITIS**





# PSORIATIC ARTHRITIS

- Psoriatic arthritis is a chronic inflammatory arthritis associated with psoriasis, characterized by joint inflammation and distinct extra-articular features. It affects both peripheral and axial joints and is part of the seronegative spondyloarthropathy group.

## Real-life example

- Imagine a town with streets (joints) and sewers (skin).
- In psoriatic arthritis, sewers (inflammation) overtake the streets (causing skin psoriasis) and begin cracking and damaging the streets (leading to arthritis), disrupting both systems simultaneously.

## Epidemiology

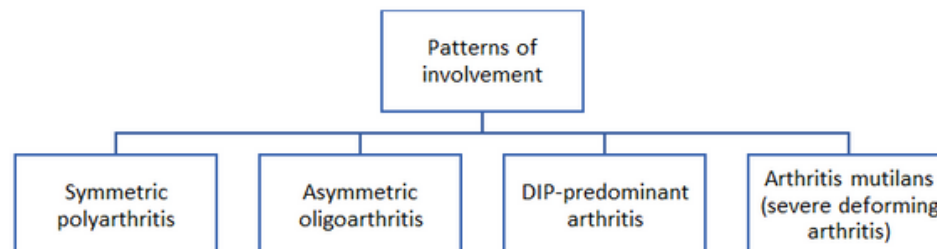
- Occurs in 5-30% of individuals with psoriasis
- Commonly presents between 30-50 years of age
- Equal prevalence in men and women

## Pathophysiology

- Immune-mediated: T-cell activation and pro-inflammatory cytokines like  $\text{TNF-}\alpha$  and IL-17 play key roles
- Genetic predisposition: Strong association with **HLA-B27**, HLA-Cw6, and HLA-B08
- Environmental triggers: Infection, trauma (Koebner phenomenon) & stress

## Clinical Features

- Articular Symptoms:
  - Asymmetric oligoarthritis ( $\leq 4$  joints) or symmetric polyarthritis (resembles rheumatoid arthritis)
  - Axial involvement: Spondylitis, Sacroiliitis
  - Distal interphalangeal (DIP) joint arthritis
  - Dactylitis (sausage-shaped fingers/toes)
- Extra-Articular Symptoms:
  - Skin and Nails: Psoriatic plaques, nail pitting, onycholysis
  - Enthesitis: Commonly Achilles tendon or plantar fascia inflammation





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## Diagnosis

- **Based on clinical history:** Joint pain, stiffness, swelling in patients with a history of psoriasis
- **Physical Exam:** Skin and nail changes, dactylitis
- **Imaging:**
  - X-ray: "Pencil-in-cup" deformity in severe cases, joint erosions
  - MRI: Detects early enthesitis and joint inflammation
- **Lab Tests:**
  - Negative rheumatoid factor (seronegative arthritis)
  - Elevated inflammatory markers: CRP, ESR

## Differential diagnosis

Feature	Ankylosing Spondylitis	Psoriatic Arthritis	Reactive Arthritis
HLA-B27 Association	Strong (~90%)	Variable	Strong (~75%)
Axial Involvement	Sacroiliac joints, spine	Sometimes spine involvement	Sacroiliac joints
Extra-Articular	Uveitis, heart, lungs	Skin plaques, nail changes	Urethritis, conjunctivitis

## Treatment

- **Pharmacological**
  - NSAIDs: For mild cases and symptomatic relief
  - DMARDs (Disease-Modifying Anti-Rheumatic Drugs): Methotrexate is first-line
  - Biologics: TNF- $\alpha$  inhibitors (adalimumab, etanercept), IL-17 inhibitors (secukinumab)
  - Targeted Synthetic DMARDs: Apremilast (PDE4 inhibitor)
- **Surgical**
  - Indicated for severe joint destruction, such as joint replacement
- **Non-Pharmacological**
  - Physical therapy and exercises to maintain joint function
  - Lifestyle modifications: Weight loss, stress reduction





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## Complications

- *Severe joint deformity (arthritis mutilans)*
- *Cardiovascular disease risk due to systemic inflammation*
- *Functional disability and reduced quality of life*

