

# Psoriasis









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# **PSORIATIC ARTHRITIS**









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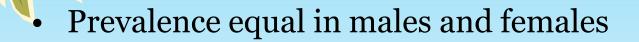


Psoriatic arthritis refers to an inflammatory arthritis that characteristically occurs in individuals with Psorisis











- Peak age of onset between 30 and 55 years
- 4-30% of psoriasis patients will develop PsA
- More men present with axial disease and radiographic damage
- %60 of those with psoriatic spondylitis or sacroiliitis have HLA-B27



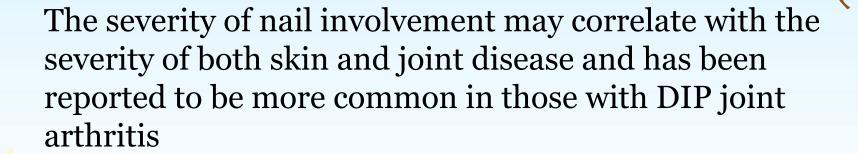
# Relation between arthritis and skin lesions



There is a weak relationship between the severity of skin disease and arthritic involvement

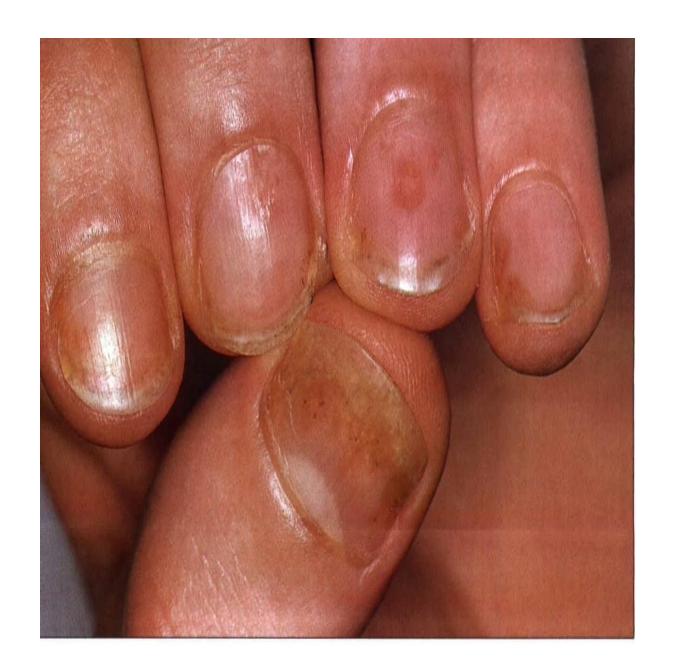


Only a minority of patients note a relationship between the activity of the skin and joint manifestations





























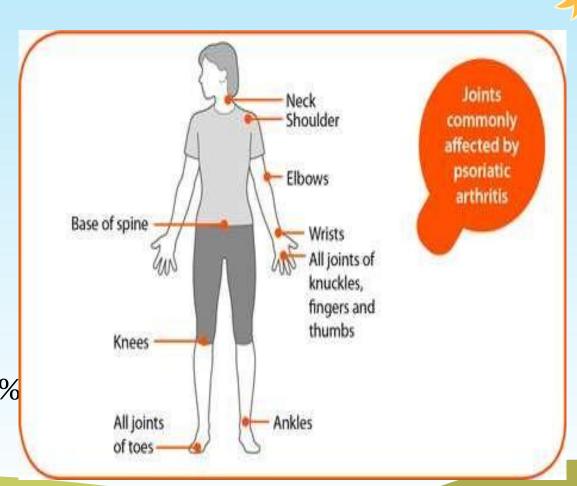
#### **Clinical Features**



• In 60–70% of cases, psoriasis precedes joint disease.

 In 15-20% of cases, the two manifestations appear within 1 year of each other.

In about of 15–20% cases, the arthritis precedes
 The onset of psoriasis.





#### Clinical Presentation of Psoriatic Arthritis



Clinical presentation of PsA is heterogeneous

- Peripheral arthritis
- Axial disease
- Enthesitis
- Dactylitis
- Skin and nail disease
- Pitting edema
- tenosynovitis
- Ocular involvement:(uveitis and conjunctivitis)









## Clinical Presentation of PsA



| Clinical pattern on presentation | Percentage of patients |
|----------------------------------|------------------------|
| Asymmetrical oligoarthritis      | 50                     |
| Symmetrical polyarthritis        | 40                     |
| Distal interphalangeal arthritis | 5                      |
| Arthritis mutilans               | 5                      |
| Spinal column involvement        | 40                     |













#### Co-morbidities Associated with PsA

Cardiovascular disease Inflammatory bowel disease

Depression/Anxiety Kidney disease

Diabetes Metabolic syndrome

Eye disease Obesity

Fatty Liver disease Osteoporosis

Gout



• Nail changes-Pitting of the fingers or toes occur in 80% of patients with PsA.







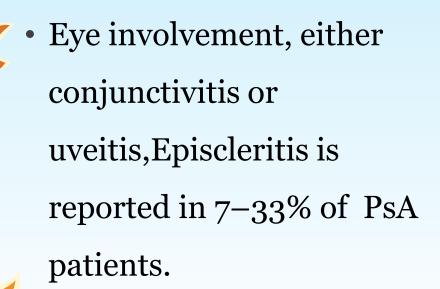
Image courtesy of International Journal of Clinical Reviews
http://www.remedicajournals.com/International-Journal-of-Clinical-Reviews/Browselssues/November-2010/Article-Nail-Psoriasis-topical-and-systemic-therapies







 Widespread shortening of digits ("Telescoping").





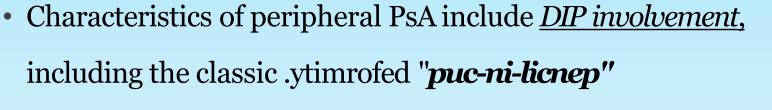




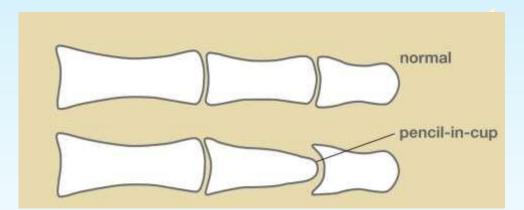
## **Radiographic Findings**



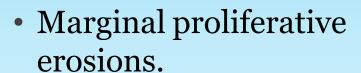
including the classic .ytimrofed "puc-ni-licnep"











- Small-joint ankylosis.
- Osteolysis of phalangeal and metacarpal bone, with *telescoping* of digits.
- Periostitis and
   proliferative new bone
   at sites of enthesitis.











Characteristics of axial PsA include asymmetric
 sacroiliitis

• compared with idiopathic AS, less apophyseal joint arthritis, fewer and less symmetric and coarse syndesmophytes.



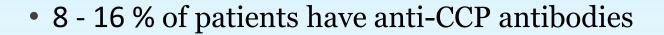




### **Laboratory Findings**



- ESR and CRP are elevated(40%)
- RF, ANA, and anti-Anti ccp Abs are present in a minority of patients





- Uric acid may be elevated in the presence of extensive psoriasis
- HLA-B27 is found in 50–70% of patients with axial disease, but 20% in patients with only peripheral joint involvement.

Table 6 – Classification criteria for psoriatic arthritis<sup>a</sup>

| Criterion  | Points |
|--|--------|
| Evidence of current psoriasis, a personal history of psoriasis, or a family history of psoriasis     |        |
| Evidence of current psoriasis on examination   | 2      |
| Personal history   | 1      |
| Family history   | 1      |
| Typical psoriatic nail dystrophy     (onycholysis, pitting, hyperkeratosis) on examination           | 1      |
| 3. Negative test for rheumatoid factor   | 1      |
| 4. Dactylitis (inflammatory swelling of an entire finger or toe)                                     |        |
| Current dactylitis on examination  | 1      |
| Personal history   | 1      |
| 5. Radiographic evidence of juxta-articular new bone formation on plain radiographs of hands or feet | 1      |

<sup>&</sup>lt;sup>a</sup> To meet **CASPAR** (**ClAS**sification criteria for **P**soriatic **AR**thritis) criteria, a patient must have inflammatory articular disease (joint, spine, or entheseal) with ≥ 3 total points from any of the 5 categories.

Adapted from Taylor W et al; CASPAR Study Group. Arthritis Rheum. 2006.<sup>47</sup>



- In mild disease no more than topical preparations to control the skin disease and NSAIDs for the arthritis are needed.
- In resistant forms of arthritis, immunosuppressive agents (methotrexate) and TNF inhibitors (infliximab, etanercept and adalimumab) have are effective.
- *Etanercept* 50 mg SC once weekly or 25 mg SC twice weekly; if twice weekly, doses should be given on same day or 3-4 days apart.
- Adalimumab- 40 mg SC q2wk.
- Infliximab- 5 mg/kg IV at 0, 2, and 6 weeks, then every 8weeks.











#### **Pretreatment**



Screening for comorbidities and baseline testing:

Screening for cardiovascular risk factors (lipids, blood pressure, and smoking)

Weight loss counseling for patients with elevated BMI Evaluation (eg, ultrasound) of the liver for patients with elevated LFTs

Screening for hepatitis in patients initiating methotrexate (MTX) therapy

Screening for latent tuberculosis (TB) in patients who may receive biologic agents.





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- Increased numbers of actively inflamed joint
- Elevated ESR or CRP
- Failure of previous medication trials
- The presence of joint damage (clinically or radiographically
- Loss of function (by Health Assessment Questionnaire [HAQ])
- Diminished quality of life
- patients who are HLA-B27-, -B39-, or -DQw3-positive are at a higher risk for progression of clinical damage
- Anti-CCP positivity

## MILD PERIPHERAL ARTHRITIS

#### **NSAIDS**

There has been some concern that nsaids may aggravate the skin psoriasis in one randomized trial of a cox-2 selective inhibitor, there was no significant difference in an index of skin involvement between the two groups

comparative studies have not found any difference in efficacy between different nsaids

Apremilast (otezla): an alternative agent for use in patients with mild PSA and multiple comorbidities, particularly in patients who wish to avoid dmard therapy, infusions, or injections, although only a portion of patients respond

joint aspiration and intraarticular glucocorticoid injection avoid the use of oral glucocorticoids



# Moderate to severe Peripheral arthritis or resistant to NSAID



• Conventional (Small Molecule) DMARD Rather Than A Biologic Agent





• The Maximal Response To Mtx Is Usually Achieved Within Three Months Of Treatment With The Drug





# Moderate to severe Peripheral arthritis or resistant to NSAID



• LEF (20 Mg Daily, Taken Orally) In Patients Who Have Persistent Joint Inflammation Despite Three Months Of Treatment With MTX (In Maximal Doses Up To 25 mg Weekly SQ) And In Patients Who Are Unable To Tolerate MTX Due To Adverse Effects



Apremilast Should Not Be Used In Patients With Erosive Diseas



#### SEVERE PERIPHERAL ARTHRITIS/ADVERSE PROGNOSIS

TNF inhibitor (etanercept, adalimumab, infliximab, certolizumab pegol, and golimumab) as first-line therapy, rather than a conventional nonbiologic DMARD

Other biologic DMARDs (eg, secukinumab or ustekinumab) are alternatives to a TNF inhibitor

in contrast to RA, MTX generally can be discontinued in PsA patients who respond to TNF-inhibitor therapy, with one important exception, which is infliximab

Choice of TNF inhibitor is based upon patient preferences for route (SQ versus IV) and frequency of administration



### **RESISTANT FORMS**



• Resistant to one TNF inhibitor: switch to a second TNF inhibitor rather than trying a different class of biologic agent. Most patients achieve maximal benefit after about 3-4 months of therapy.



• Resistant to two TNF inhibitors: use an IL-17 inhibitor (ie, secukinumab or ixekizumab) or the IL-12/23 inhibitor ustekinumab.



Resistant to multiple biologics: Abatacept, the costimulation blocker or Janus kinase inhibitors (
 Tofacitinib)





# AXIAL DISEASE TREATMENT



Mild axial symptoms: NSAIDs

Moderate to severe axial disease: TNF inhibitors



Axial disease resistant to initial TNF inhibito: switching to a second TNF inhibitor and, if that is inadequate, to an alternative biologic agent such as secukinumab or ustekinumab







- Alternative conventional disease-modifying antirheumatic drugs (DMARDs), such as sulfasalazine (SSZ), azathioprine, or cyclosporine
- Brodalumab: is an anti-IL-17 agent; concerns about suicidal ideation
- Guselkumab (Tremfya): is an anti-IL-23-specific monoclonal antibody
- Rituximab: variable results
- Filgotinib: selective Janus kinase 1 (JAK1) inhibitor under investigation for PsA
  - Colchicine: Conflicting results







# Thanks for your attention