Psoriatic arthritis

- Prevalence of Psoriatic Arthritis, PsA, is (1%).
- Arthritis occurs in (5-7%) of people with psoriasis.
- Males and Females are equally affected by Psoriatic Arthritis.
- Peak Age of onset of PsA is between 30 and 50 years.
- In 70% of patients with PsA, the Psoriasis is present many years before the onset of arthritis.
- In 15% of patients with PsA, the Psoriasis occurs concomitantly with the arthritis.
- In 15% of patients with PsA, adults and more often children, the arthritis appears before the skin or nail changes.
- Most of PsA patients have a positive family history for Psoriasis.

Clinical presentation of Psoriatic Arthritis:

1. Mono or oligoarthritis with Enthesitis resembling Reactive Arthritis (30 – 50 %) of patients.
2. Symmetrical polyarthritis resembling RA (30 – 50 %) of patients.
3. Axial disease (spondylitis, sacroiliitis and or arthritis of the hip and shoulder joints) resembling Ankylosing Spondylitis with or without peripheral joint disease (about 5%).
4. Distal Interphalangeal joint (25 %).
5. Arthritis Mutilans, occurs in (5%) of patients.

- Transition of one pattern into another, is not uncommon and may result in heterogeneous combination of joint disease.

- Dactylitis of digits or toes as a result of combination of tenosynovitis and arthritis of DIP or PID.
- Distal Interphalangeal joint involvement, almost always associated with psoriatic nail changes.

Extra-articular Features:

- **Nail changes**, multiple nail pitting usually more than 20 in a single nail of the digit affected by Dactylitis or inflamed DIP joint is
characteristic of Psoriatic Arthritis. *Onycholysis* (separation of the nails from underlying nail bed), transverse depression (ridging) and cracking, *sublingual keratosis* (brown-yellow discoloration, oil-drop sign) and *leukonychia*.

Nail involvement is the only clinical feature that identifies patients with Psoriasis who are likely to develop arthritis.

- **Skin lesion**, typical psoriatic skin lesion is sharp demarcated erythematous plaque with well marked silver scale on extensor surface of the elbows, knees, scalp, ears and pre sacral area, but may be found anywhere on the body. Their size may vary from (1mm) in early acute psoriasis to several centimeters in well established disease. Gentle scraping usually produces pinpoint bleed (*Auspitz's sign*).

- **Ocular involvement**, predominantly *Conjunctivitis* and *Uveitis*.

- **Aortic Insufficiency**.

- **Pulmonary fibrosis**, involving the upper lobe.

- **Amyloidosis**.

**Radiographic Features:**
The characteristic radiographic features of Psoriatic arthritis are the unique combination of erosion which helps in differentiating it from Ankylosing Spondylosis and bone production in a specific distribution which distinguishes it from RA.

Bone proliferation at the base of the distal phalanx and resorption of tafts of the involved distal phalanges, joint erosion with tapering of the proximal phalanx and bone proliferation of distal phalanx (pencil-in – cup deformity) and fluffing periostitis.

**Investigations:**

- ESR and CRP are raised.
- ANA and RF are negative.
- X-Ray characteristics findings, mentioned above.

**Treatment:**

- Better prognosis than RA.
- Simple analgesic.
- NSAIDS.
- Intra-articular injections, caution be made because of risk of infection specially with Staph.
- Antimalarials should be avoided, exfoliate reaction.
- Avoid splint and prolonged rest (risk of boney ankylosis).
• Exercise and posture attention.
• DMARDS, like Sulphasalazine, Methotrexate and Azathioprine, are used for persistent peripheral arthritis and axial as well as severe skin psoriasis; Ciclosporine and Leflunomide are also used.
• Retinoid derivatives useful for psoriasis and arthritis (teratogenic).
• PUVA, photo chemotherapy is helpful for patients with extensive skin involvement and joint disease, but only in non-spondylitic disease.
• Steroid used in a low dose, either in combination with DMARDS or as bridge therapy.
• High dose of steroid is used in extensive skin involvement.
• Aggressive and destructive disease not responding to a single agent therapy use either:
  1. Combination therapy.

Or

  2. Biologic Agents:
     a. Etanercept.
     b. Infliximab.
     c. Adalimumab.

**Worse prognosis of Psoriatic arthritis:**
  1. Family history of psoriasis.
  2. Disease onset before the age of 20 years.
  3. Presence of HLA-DR3 or DR4.
  4. Erosive or poly articular.
  5. Extensive skin involvement.