



## UNIQUE PRESENTATION OF A CASE OF PSORIATIC ARTHROPATHY

## Orthopaedics

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## KEYWORDS

## INTRODUCTION:

The term licked candy stick appearance refers to the tapering of the tips of the metacarpal bones, metatarsal bones, phalanges, or the clavicle ends and is usually associated with psoriatic arthropathy. It has also been reported in rheumatoid arthritis and leprosy (1,2). Paterson showed defects in the vascular end loops and delayed venous emptying in leprosy patients with bone resorption of the hand (3,4). Concentric bone resorption can be noted in leprosy in an active paralytic extremity owing to the motor denervation seen in peripheral nerves in leprosy infection is thought to be due to an imbalance between tensile and compressive forces that maintain normal bone architecture. Absorption of bone in leprosy manifests as a decrease in bone length and width and results in a tapered appearance at the end of the bone, which has been likened to a licked candy stick. When complicated by repeated microtrauma, secondary bacterial infection, or both, digits may be resorbed. (5)

## CASE DISCUSSION:

A 34 year old male presented with a history of skin lesions for 3 years, biopsy proven to be psoriasis and joint deformities of the small joints of hands and feet along with minimal synovitis of the knee and elbow joints. ESR was 86 (Erythrocyte Sedimentation Rate) and CRP was 32.2 (C-reactive protein) was elevated while Anti-CCP (Anti Cyclic Citrullinated Peptide) was negative. Rheumatoid factor was negative. X rays of the foot revealed Pencil in neck or Licked Candy stick appearance, while of the pelvis revealed mild sacroilitis. Synovitis of the knee and elbow joint was confirmed via ultrasound. Patient satisfied the CASPAR criteria and was diagnosed with psoriatic arthropathy. Patient was treated with Methotrexate and Sulphasalazine after which he symptomatically improved though deformities persisted. Conservative management using physiotherapy and rehabilitation for the deformities and no surgical intervention was given.



Figure 1 : Clinical Picture



Figure 2 : X ray pelvis showing mild sacroilitis



Figure 3 : X rays of the foot showing Licked Candy appearance

## DISCUSSION

Psoriatic arthritis (PsA) has been defined as a unique inflammatory arthritis associated with psoriasis. Its exact prevalence is unknown, but estimates vary from 0.3% to 1% of the population. Initially, PsA typically presents as an oligoarticular involvement and in mild form. However, with chronicity PsA becomes polyarticular, and manifests as a more severe disease form, in at least 20% of the patients. Clinical characteristics of the disease which manifests in both sexes include peripheral arthritis involving few small joints in asymmetrical fashion; involvement of DIP joints; sausage digits; arthritis mutilans; ankylosing spondylitis; higher incidence of nail involvement than occurs in uncomplicated psoriasis. The skin lesions may either precede or succeed joint involvement. (6) There are reports suggesting that PsA is a benign arthropathy and erosive bone damage is uncommon (7), but Kane and Pathare examined an early arthritis clinic cohort followed up over 2 years and reported significant bone erosions in as many as 50% of PsA patients despite apparently good disease control with disease-modifying anti-rheumatic drugs such as methotrexate (8). One novel oral compound that has been recently established for the treatment of PsO and PsA is apremilast, a small molecule PDE4 inhibitor which in increased intracellular cAMP levels and modulates the expression of inflammatory mediators critically involved in PsO and PsA pathogenesis like TNF, IL-12, IL-17, and IL-23. (9)

## CONCLUSION

Psoriatic arthropathy though has an increasing prevalence is still not a widely understood disease. With introduction of newer agents, such as biological disease modifying agents, good control of PsA can be achieved, which is necessary to prevent it from transforming into a joint debilitating disease.

## REFERENCES

1. Reeder MM. Gastrointestinal tract and abdomen. In: Reeder MM, Bradley WG, eds. Reeder and Felson's gamuts in radiology. 3rd ed. New York, NY: Springer-Verlag, 1993.
2. Gondos B. The pointed tubular bone. Radiology 1972; 105:541-545.
3. Paterson DE: Radiological bone changes and angiographic findings in leprosy with special reference to the pathogenesis of "atrophic" conditions of the digits. J Fac Radiologists 7:35-56, 1955
4. Poznanski AK: Infections of the hand, The Hand in Radiologic Diagnosis. Edited by AK Poznanski. Philadelphia, WB Saunders Co., 1974, p 401.
5. Enna CD, Jacobson RR, Rausch RO. Bone changes in leprosy: a correlation of clinical and radiographic features. Radiology 1971; 100:295-306.

6. J.M.H.MollB.Sc.Psoriatic arthritis Volume 3, Issue 1, 1973, Pages 55-78
7. Shbeeb M, Uramoto KM, Gibson LE, O'Fallon WM, Gabriel SE: The epidemiology of psoriatic arthritis in Olmsted County, Minnesota, USA, 1982-1991. *J Rheumatol.* 2000, 27: 1247-1250. PubMedGoogle Scholar
8. Kane D, Pathare S: Early psoriatic arthritis. *Rheum Dis Clin North Am.* 2005, 31: 641-657. 10.1016/j.rdc.2005.07.009.
9. Edwards CJ, Blanco FJ, Crowley J, et al. Long-term 52-week results of PALACE 3, a Phase III, randomized, controlled trial of apremilast, an oral phosphodiesterase 4 inhibitor, in patients with psoriatic arthritis and current skin involvement [abstract 212] *Rheumatology.* 2014;53(Suppl 1):i138.