

Hand Full of Sausages-Forme Frustae of Severe Psoriatic Arthritis: A Case Report

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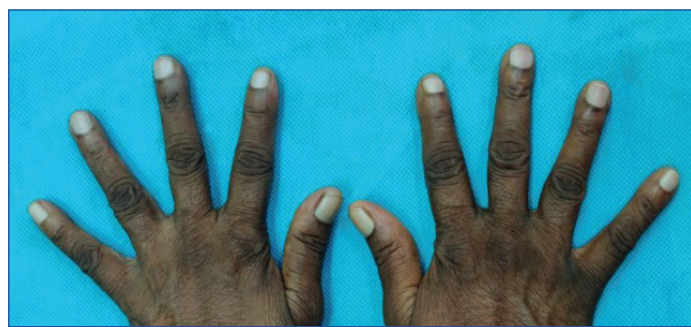
ABSTRACT

Dactylitis or sausage shaped digits is one of the hallmark features of psoriatic arthritis which occurs in association with psoriasis. This is a report of 50-year-old female, known case of psoriasis vulgaris, presented with complaints of red, painful and swollen digits of both hands since two weeks. She also complained of pain and restricted movements of all small joints of hands since two days. On examination, all the digits were erythematous, tender and swollen. Investigations revealed elevated Erythrocyte Sedimentation Rate (ESR) and C-Reactive Protein (CRP), negative rheumatoid factor and x-ray hands showed joint space narrowing and soft tissue swelling. Based on Classification Criteria for Psoriatic Arthritis (CASPAR) with score of 3/6, psoriatic arthritis was diagnosed. Further evaluation of other joints revealed features of sacroiliitis in x-ray pelvis. Psoriatic dactylitis involving all digits and as an initial symptom of psoriatic arthritis is rarely reported in literature. Dactylitis involving all the digits may be a forerunner of severe psoriatic arthritis.

Keywords: Classification criteria for psoriatic arthritis criteria, Dactylitis, Sacroiliitis

CASE REPORT

A 50-year-old female, home-maker was a known case of psoriasis vulgaris since 16 years and was on treatment with emollient, intermittent topical steroids, narrow band Ultraviolet (UV)-B therapy and oral nutritional supplements. She was asymptomatic for the past three years and later presented with complaints of red, painful and swollen digits of both hands since two weeks. She had developed painful and restricted movements of all small joints of hands for since last two days. There was no history of early morning stiffness or contact with chemicals or systemic drug intake. For the past three years, she was only on emollients and without any skin lesions. She did not have any other co-morbidity. Her family history was unremarkable. Physical examination revealed erythematous, tender and swollen digits of both hands [Table/Fig-1]. Tenderness was more over the distal interphalangeal joints with restriction of movements. There was no evidence of psoriatic plaques at the time of presentation. Hand deformities and nail pitting were also absent [Table/Fig-2].



[Table/Fig-2]: Absence of hand deformities and nail pitting.

and negative rheumatoid factor. The x-ray of hands showed juxta articular osteopenia, soft tissue swelling, joint space narrowing and subperiosteal new bone formation [Table/Fig-3]. On ultrasound of small joints of hands [Table/Fig-4], features suggestive of early and active psoriatic arthritis like synovial thickening, soft tissue oedema, increased vascularity and tendinitis were noted.



[Table/Fig-1]: Showing erythema and swelling of all the digits.

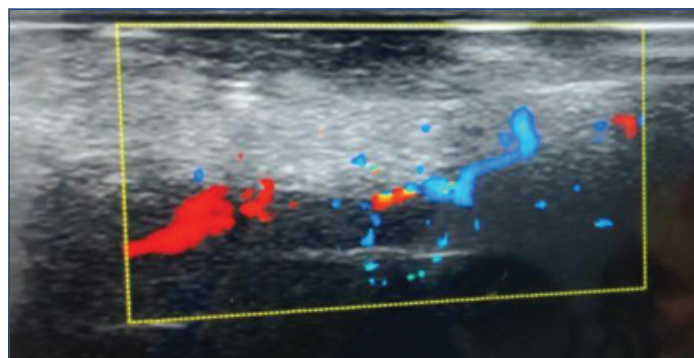


[Table/Fig-3]: X-ray hands showing juxta articular osteopenia, soft tissue swelling, joint space narrowing and subperiosteal new bone formation.

The differential diagnosis considered were psoriatic arthritis, rheumatoid arthritis and atypical Sweet's syndrome. Blood investigations revealed ESR-48 mm/hour, CRP more than 6.0 mg/L

Based on CASPAR with score of 3/6 (past history of psoriasis, presence of dactylitis and negative rheumatoid factor) the diagnosis of psoriatic arthritis was made. On further evaluation of other joints, there was bilateral grade III sacroiliitis and achilles tendinitis. After preliminary blood investigations, the patient was started on tablet

methotrexate 15 mg/week and tablet sulfasalazine 1 gm twice daily. Her lesions started to regress in four weeks [Table/Fig-5].



[Table/Fig-4]: Ultrasound showing small joints of hands showing increased vascularity and soft tissue oedema.



[Table/Fig-5]: Erythema and swelling regressed after one month of treatment.

DISCUSSION

Dactylitis or sausage shaped digits is one of the hallmark features of psoriatic arthritis that occurs in 1-9% of Asian psoriatic patients [1,2]. Psoriatic dactylitis involving all digits and also is an initial symptom of psoriatic arthritis is rarely reported in literature.

Psoriatic arthritis can manifest in multiple patterns with cutaneous and joint involvement. Dactylitis or sausage shaped digits is defined as inflammation involving multiple layers of digit leading to uniform swelling of digit. The pathogenetic mechanisms implicated are genetic risk factors [3], deep koebnerization [4] and biomechanical stress [5,6], leading to soft tissue inflammation and tenosynovitis. The pathogenesis of psoriatic arthritis differs from that of psoriasis in being (Cluster of Differentiation) CD8+ cells [HLA (Human Leukocyte Antigen) class-I] mediated while psoriasis is CD4+ cells (HLA class II) mediated [7,8]. In a large cohort study on psoriatic arthritis, psoriatic dactylitis has been found to involve the feet more than

hands and average number of digits affected ranged from 0 to 6. All 10 digits were affected in only 3 patients (1%) [9]. To the best of our knowledge, dactylitis involving all the digits (hand full of sausages) has not been documented so far in Indian literature.

Dactylitis as a marker of severe psoriatic arthritis has been previously reported in literature [9,10]. This patient on further evaluation had subclinical involvement of bilateral sacroiliac joints and achillotendinitis. Hence, dactylitis involving all the digits may be considered as a forme fruste (forerunner) of severe form of psoriatic arthritis like arthritis mutilans. In this patient, clinical sacroiliitis and complications were avoided due to timely intervention.

Delayed diagnosis and treatment of psoriatic arthritis can lead to irreversible joint damage and significant reduction in health related quality of life [11]. This further emphasises the need for regular follow-up of even those psoriatic patients who are in remission for symptoms of dactylitis and diagnosis of psoriatic arthritis based on CASPAR and simple investigations like ultrasound of joints.

CONCLUSION(S)

Hand full of sausages or psoriatic dactylitis involving all the fingers has been reported rarely. Psoriatic dactylitis involving all the digits may be considered as a forerunner- forme fruste of severe psoriatic arthritis. Hence, it is important for the treating dermatologists to be vigilant about symptoms and signs of psoriatic dactylitis.

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