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Seronegative Arthropathy - RS3PE

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ABSTRACT

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RS3PE is a rare inflammatory arthritis which can occur idiopathically or as a paraneoplastic manifestation of an underlying malignancy. We present a case presented with remitting seronegative symmetrical synovitis with pitting oedema finally diagnosed with Adenocarcinoma Lung.

Keywords: Seronegative arthropathy, RS3PE, RA factor

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INTRODUCTION

Remitting seronegative symmetrical synovitis with pitting oedema is a rare clinical entity that is early missed due to lack of knowledge.[1] It is a rare inflammatory arthritis, commonly affects people in older age group. It can be a paraneoplastic manifestation of an underlying internal malignancy. We present a case which was diagnosed as RS3PE with Adenocarcinoma Lung.

CASE REPORT

A 62 year old male who is a chronic smoker & alcoholic, presented with swelling of both hands & foot since 2 months with no other associated symptoms. Thereis no significant medical & past history except an old pulmonary tuberculosis.

General examination showed pallor, grade II clubbing, pitting edema of dorsum of both hands and feet. Vitals were within normal limits **(figure 1)**.

Systemic examination

Locomotor system: arthritis of small joints of hands and feet. Difficulty in flexion of hands.

Other systems were normal except emphysematous chest and a lower liver dullness in 6th right ICS.

Complete blood count – normocytic anaemia (Hb 10 gm %) and elevated Acute phase reactants. (ESR – 87mm/1st hour and CRP – 1.3) LFT shows hypoalbuminemia. Rest is normal. RFT and URE normal. In view of acute onset symmetrical polyarthritis of small joints and hands and feet with high ESR, anaemia, negative Rheumatoid Factor and ACCP, provisional diagnosis of remitting seronegative symmetrical synovitis with pitting edema was made (RS3PE).

As there are case reports of internal malignancy in cases of RS3PE, patient has undergone further imaging studies to rule out malignancy.

USG abdomen – Normal

Chest Xray PA view – homogenous opacities in the right upper lobe with no air bronchogram

HRCT – thorax: was done in view of Chest Xray and it showed a large peripheral mass of involving anterior and posterior segments of right upper lobe – possibilities of lung carcinoma with evidence of right 3rd rib erosion and right hilar lymphadenopathy

CT guided biopsy – large cells having eosinophilic cytoplasm and nucleus with nucleolus, arranged in sheets, groups and acinar pattern suggestive of adenocarcinoma

With the support of clinical, laboratory and imaging evidence, final diagnosis of RS3PE with internal malignancy – Adenocarcinoma Right Lung was made. Patient was given symptomatic measures and referred to oncology department for further management.

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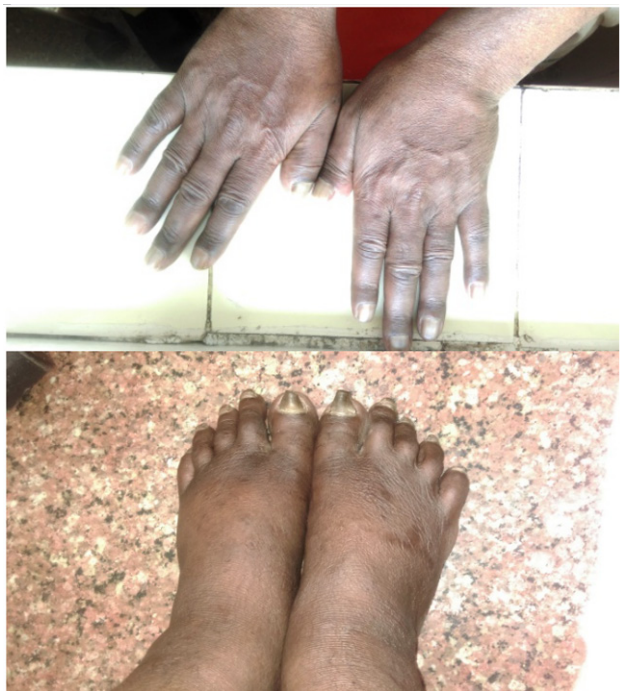

Figure 1. **Pitting oedema of hands and feet**

DISCUSSION

Remitting seronegative symmetrical synovitis with pitting edema (RS3PE) syndrome was first reported by McCarty et al. in 1985.[5]

RS3PE is an acute onset polyarthritis syndrome which can occur idiopathically or as a paraneoplastic complication of malignancy.[4]

Although the pathogenesis of RS3PE remains unknown, over-production of IL-6 has been demonstrated to contribute to its development.[2,3]

Diagnostic criteria:[6]

- Sudden onset polyarthritis
- Bilateral hand pitting oedema, age >50 years
- Negative rheumatoid factor

Idiopathic variety responds well to small doses of steroids.[4] The role of steroids in paraneoplastic is variable. The rheumatologic symptoms may remit with successful treatment of the underlying malignancy.

Clinicians should be aware that when a rheumatologic disorder does not respond to treatment as expected, an underlying malignancy should be suspected. Commonly associated malignancies include lung cancers, endometrial carcinoma, and leukemia.

END NOTE

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Conflict of Interest: None declared

Editor's Remarks: A rare variant of seronegative arthropathy is presented. This case is presented to create awareness of the possibility of such rare associations.

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