

## A middle-aged female with dyspnoea and skin rash

Tarun Krishna Boppana, Saurabh Mittal, Karan Madan, Anant Mohan

Department of Pulmonary, Critical Care and Sleep Medicine, All India Institute of Medical Sciences, New Delhi, India

A 42-year-old lady presented to Pulmonary Medicine outpatient services with the complaints of cough and shortness of breath for the last 2 years. Cough was predominantly dry, while dyspnoea was gradually progressive affecting her activities of daily living. She had associated history of bilateral wrist and hand joints pain and swelling along with morning stiffness for the same duration. She had also noticed a non-itchy rash over her left arm since last year for which she had applied topical moisturizers without any benefit. On examination, her respiratory rate was 22 per rate, and room air pulse oxygen saturation was 91%. She had tenderness of both wrists as well as proximal interphalangeal joints. Her left arm had non-blanchable blotchy dark brown lesions with no scaling or surrounding erythema (Figure 1). Chest examination demonstrated bilateral basilar crepitations on auscultation. Chest radiograph (posteroanterior view) revealed bilateral lower zone reticulo-nodular opacities consistent with interstitial lung disease. Rheumatoid factor testing demonstrated high titres. Further testing for antinuclear antibodies and anti-cardiolipin antibodies was negative.

**Question:** What is the primary diagnosis in this lady with ILD and what this skin rash is known as?

**Answer:** Livedo reticularis associated with rheumatoid arthritis.

Livedo reticularis is a livedoid discoloration of the skin in a reticular pattern [1]. LR can be physiological or pathological. Physiological LR is seen in young healthy females during cold weather and its appearance may vary according to local temperature. Pathological LR, on the other hand, is a persistent lesion and is commonly seen in antiphospholipid syndrome (APS) or systemic lupus erythematosus-associated APS. Around one-fourth of primary APS patients and almost three-fourths of SLE-associated APS patients have LR. It is uncommon in rheumatoid arthritis and is seen in less than 5% of the subjects [2]. These individuals usually have associated other extra-articular manifestations such as rheumatoid nodules, sicca symptoms, and pulmonary involvement [3]. They are at increased risk of arterial and venous thrombosis even in the absence of APS and accelerated atherosclerosis. The condition does not require any specific treatment but some of them may develop systemic vasculitis involving other organ systems as well.

### Conflict of interest

None declared.

### References:

1. Sajjan VV, Lunge S, Swamy MB, et al. Livedo reticularis: A review of the literature. *Indian Dermatol Online J.* 2015; 6(5): 315–321, doi: [10.4103/2229-5178.164493](https://doi.org/10.4103/2229-5178.164493), indexed in Pubmed: [26500860](https://pubmed.ncbi.nlm.nih.gov/26500860/).
2. Sangle SR, D'Cruz DP. Livedo reticularis: an enigma. *Isr Med Assoc J.* 2015; 17(2): 104–107, indexed in Pubmed: [26223086](https://pubmed.ncbi.nlm.nih.gov/26223086/).
3. Calgüneri M, Ureten K, Akif Öztürk M, et al. Extra-articular manifestations of rheumatoid arthritis: results of a university hospital of 526 patients in Turkey. *Clin Exp Rheumatol.* 2006; 24(3): 305–308, indexed in Pubmed: [16870099](https://pubmed.ncbi.nlm.nih.gov/16870099/).



**Figure 1.** Clinical photograph of posterior aspect of the arm demonstrating blotchy reticular rash

**Address for correspondence:** Saurabh Mittal, Department of Pulmonary, Critical Care and Sleep Medicine, All India Institute of Medical Sciences (AIIMS), New Delhi, India, e-mail: [saurabh\\_kgmu@yahoo.co.in](mailto:saurabh_kgmu@yahoo.co.in)

DOI: 10.5603/ARM.a2021.0013

Received: 07.10.2020

Copyright © 2021 PTChP

ISSN 2451–4934

**Conflict of interest:** None declared