

Multicentric reticulohistiocytosis associated with thymic carcinoma

A 70-year-old male presented with a 1-year history of bilateral hand, shoulder and knee pain. Examination revealed tenderness of the aforementioned joints without synovitis, as well as erythematous papules (Fig. 1A) on the hands, elbows and ears. Laboratory studies were normal, including full blood count, serum creatinine, ESR, CRP, ANA, RF and anti-CCP IgG. Hand radiographs (Fig. 1B) demonstrated erosive changes of the PIPs and DIPs. Biopsy of one papule (Fig. 1C) showed lymphohistiocytic proliferation and multinucleated giant cells with eosinophilic cytoplasm, confirming the diagnosis of multicentric reticulohistiocytosis. MTX therapy resulted in moderate symptom improvement.

Four months later, the patient was evaluated for chest pain. Chest CT (Fig. 1D) revealed an anterior mediastinal mass, later identified as thymic carcinoma.

Multicentric reticulohistiocytosis is a rare systemic inflammatory disease, featuring destructive polyarthritis and papulonodular skin lesions. About 25% of multicentric reticulohistiocytosis patients have an underlying malignancy, with reported cases involving most types of solid and haematological cancers [1]. To the best of our knowledge, this is the first reported case of multicentric reticulohistiocytosis associated with thymic carcinoma. Diagnosis of multicentric reticulohistiocytosis should prompt consideration of a coexisting malignancy. No well-defined treatment guidelines currently exist, but treatment of the underlying malignancy may lead to regression of multicentric reticulohistiocytosis symptoms [2].

Funding: No specific funding was received from any funding bodies in the public, commercial or not-for-profit sectors to carry out the work described in this manuscript.

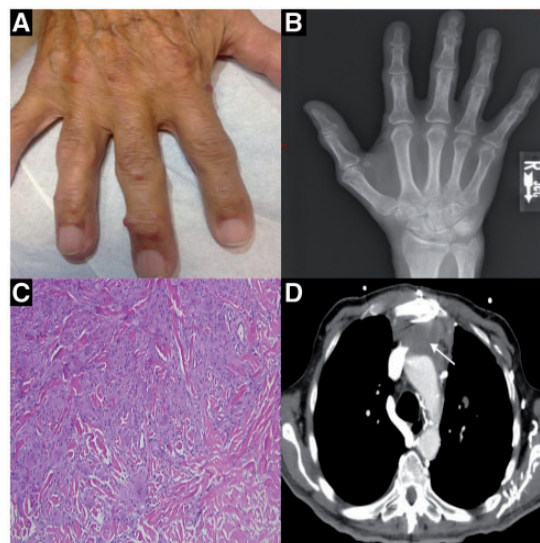
Disclosure statement: The authors have declared no conflicts of interest.

Yasir Rudha¹, Ella Starobinska², Yasir Abdulqader¹, Amira Attia¹, Carlo Guerrero^{1,2} and Konstantinos Parperis^{1,2}

¹Department of Internal Medicine, Maricopa Medical Center and ²The University of Arizona College of Medicine-Phoenix, Phoenix, AZ, USA

Correspondence to: Yasir Rudha, Department of Internal Medicine, Maricopa Medical Center, 2601 East Roosevelt

Fig. 1 Clinical, radiographic and histological features of multicentric reticulohistiocytosis associated with thymic carcinoma



(A) Multiple erythematous to flesh-coloured papules on the extensor aspects of the DIP, PIP and metacarpal joints. (B) Radiograph of the right hand showing erosive changes predominantly involving the DIP and PIP joints and carpals. The distribution is bilateral and symmetrical, with skip levels and soft tissue swelling. (C) Biopsy of a papule showing a nodular proliferation of histiocytes and multinucleated giant cells with eosinophilic cytoplasm within the superficial and deep dermis. (D) CT of the chest revealed a soft tissue mass (2.6 cm × 6.3 cm, arrow) within the anterior mediastinum, encasing the left brachiocephalic vein and the main pulmonary artery trunk.

Street, Phoenix, AZ 85008, USA.
E-mail: yasir.rudha@mihs.org

References

- 1 Selmi C, Greenspan A, Huntley A, Gershwin ME. Multicentric reticulohistiocytosis: a critical review. *Curr Rheumatol Rep* 2015;17:511–6.
- 2 Tan BH, Barry CI, Wick MR, White KP *et al.* Multicentric reticulohistiocytosis and urologic carcinomas: a possible paraneoplastic association. *J Cutan Pathol* 2011;38:43–8.