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Burning red hot feet

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1. Introduction

A man in his fifties presented with 1-year history of burning sensation and pain in both feet with dusky erythema on both dorsal feet and soles with no associated systemic complaint. Cutaneous examination revealed symmetric well to ill-defined blanchable dusky erythema on dorsum of feet involving toes and soles, with slight elevation of temperature of overlying skin (Fig. 1). Peripheral pulses including dorsalis pedis, anterior tibial and posterior tibial artery were palpable and sensory examination were normal. Laboratory investigations re-

Fig. 1. Clinical image of the patient showing symmetric well to ill-defined blanchable dusky erythema on toes and soles.

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vealed haemoglobin-16.5 g/dl with high haematocrit and normal leucocyte and platelet count. The ANA and cryoglobulins were negative. Arterial and venous Doppler of both lower limbs were normal. On further evaluation, serum erythropoietin level was low (2.92 mIU/ml; normal values: 4.3–29 mIU/ml) and JAK2 mutation (V617F/G1849T) was detected. What is your diagnosis?

2. Diagnosis

Erythromelalgia is a rare and often disabling clinical condition characterized by intermittent attacks of intense burning or pain with marked erythema of skin involving predominantly lower extremities. Erythromelalgia can be primary or secondary [1]. Primary erythromelalgia is caused by a genetically determined neuronal dysfunction of voltage-dependent ion-channels. However, secondary erythromelalgia is most often associated with myeloproliferative disorders (essential thrombocytosis, polycythemia vera, myelofibrosis) and connective tissue disease. In our patient, clinical symptoms of erythromelalgia led to the diagnosis of polycythemia vera. Clinical episodes in erythromelalgia are often triggered by factors such as increase in temperature, heat and physical activity. Differential diagnoses of erythromelalgia include vascular causes such as peripheral arterial disease, soft tissue infections, large and small fibre neuropathy etc. Therapeutic interventions aim towards attenuation of pain and improvement of the patient's quality of life [2].

Conflict of interest disclosure

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Contributorship statement

VT and DD had full access to all the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis and were responsible for the study concept and design. VT and DD drafted the manuscript. DD contributed to the critical revision of the manuscript for important intellectual content and supervised the study. All authors contributed to the acquisition, analysis and interpretation of data.

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