

Acrocyanosis as a rare presentation of drug-induced cutaneous vasculitis: a case report

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Introduction

Acrocyanosis is characterised by persistent bluish discolouration of the extremities, resulting from reduced peripheral blood flow leading to increased oxygen extraction. The aetiology can be divided into primary and secondary causes. While primary acrocyanosis is generally painless and has a benign course, secondary causes may lead to complications. This case reported acrocyanosis secondary to cutaneous vasculitis which progressed to digital gangrene, which is a rare complication of cutaneous vasculitis.

Case presentation

A 68-year-old man presented with a four-day history of bluish discolouration involving bilateral toes associated with pain and started to become gangrenous.

Radiological investigations for critical limb ischemia did not show evidence of critical arterial stenosis. Serological investigations for autoimmune causes were also unyielding.

Further history revealed history of recent administration of intramuscular injections with diclofenac, a non-steroidal anti-inflammatory agent for renal colic pain a few days prior to the onset of the pain.

Thorough skin search showed multiple purpuric rash of his thighs, buttocks and abdomen. Skin biopsy confirmed the diagnosis of cutaneous (lymphocytic) vasculitis, which was likely to be drug-induced. The acrocyanosis initially responded to methylprednisolone, however unfortunately it progressed further to digital gangrene which required bilateral transmetatarsal amputations.

Conclusion

Knowledge on clinical features, aetiology and investigations of secondary acrocyanosis is crucial for early recognition and treatment of the underlying cause to prevent irreversible complications.



Fig. 1 Maculopapular and petechial eruption on the trunk

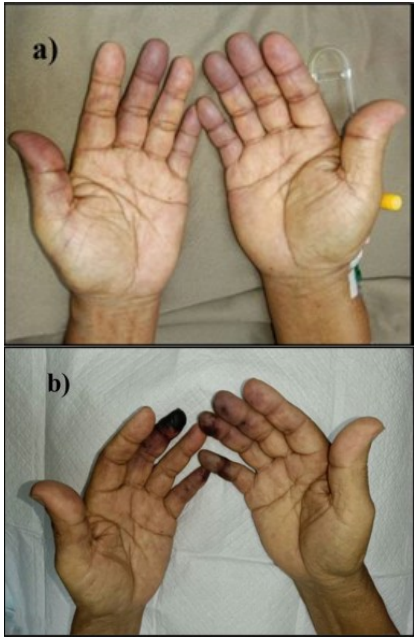


Fig. 2 (a) Purpuric patches on fingers at initial presentation, **(b)** 2 weeks later: Progression to black necrotic tissue consistent with dry gangrene

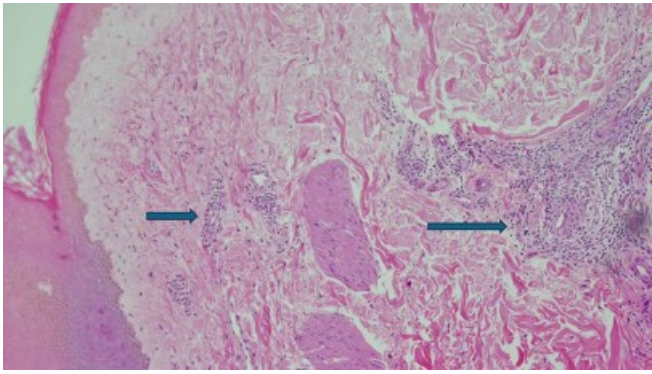


Fig. 4 Histologically at 10x ocular magnification highlights the presence of perivascular inflammatory response predominantly by lymphocytes and occasional plasma cells. (the arrows)

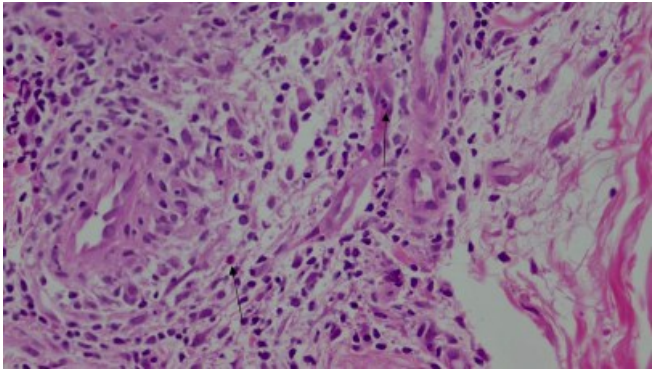


Fig. 5 At 40x ocular magnification, occasional eosinophils (arrows) are also seen among the lymphocytes



Fig. 3 (a) Purpuric patches on toes and distal feet at initial presentation, **(b)** 2 weeks later: Progression to black necrotic tissue consistent with dry gangrene, **(c)** Post-transmetatarsal amputation

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