# Warfarin-induced calciphylaxis

Muhsen Al-ani, 1,2 Konstantinos Parperis<sup>3</sup>

<sup>1</sup>Maricopa Medical Center, Phoenix, Arizona, USA <sup>2</sup>University of Arizona College of Medicine, Phoenix, Arizona,

<sup>3</sup>Department of Medicine, Maricopa Medical Center and University of Arizona College of Medicine, Phoenix, Arizona,

Correspondence to Dr Muhsen Al-ani, dr.muhsenalani@gmail.com

Accepted 6 January 2016

### **DESCRIPTION**

A 76-year-old woman, with a history of hypertension and atrial fibrillation, was admitted to our hospital for sepsis secondary to necrotic skin lesions. The patient had a 6-month history of non-healing necrotic skin ulcers affecting her lower extremities. She reported that her symptoms had begun 1 month after she had started taking warfarin 5 mg daily for atrial fibrillation. The lesions first started as blisters, which then burst and became painful ulcers. The patient was then seen by her primary care provider who recommended wound care and stopping warfarin, but the ulcers got worse. On this admission, physical examination was significant for low-grade fever, irregularly irregular heart beat and skin lesions on both calves (figure 1). The differential diagnosis included infection, vasculitis, cryoglobulinaemia and pyoderma gangrenosum.

Blood work showed leucocytosis, while serum electrolytes, renal and liver function tests, antineutrophil cytoplasmic antibodies, cryoglobulin and parathyroid hormones were all within normal limits. Radiographs of the lower extremities



Figure 1 Necrotic skin ulcers affecting the left leg.



**Figure 2** X-ray revealing soft tissue ulcerations with vascular calcifications (arrowhead) and superficial soft tissue calcifications (arrow).

revealed soft tissue ulcerations with vascular and superficial soft tissue calcifications (figure 2).

Calciphylaxis was confirmed by skin biopsy, which demonstrated focal calcification of the small-sized to medium-sized arteries, fibrinoid changes in the wall and luminal debris with thrombosis. The patient received wound care and antibiotics; wound culture showed normal skin flora but the patient continued to spike fever so we continued the antibiotics. General surgery recommended wound debridement but the patient refused. Four weeks later, her condition worsened and she died from severe sepsis with multiorgan failure.

Calciphylaxis is a rare disease characterised by calcification of small-sized and medium-sized vessels that leads to ischaemic necrosis. The estimated disease-specific survival rate for calciphylaxis 1 year after diagnosis is 45.8%; in one report, sepsis was the leading cause of death in 41% of patients with calciphylaxis who died. 2

## **Learning points**

- Calciphylaxis is associated with high morbidity and mortality.
- ► In a patient with non-healing ulcers on the lower extremities, calciphylaxis should be considered as a possible diagnosis.
- A characteristic radiographic finding of calciphylaxis is the presence of vascular calcification of the subcutaneous vessels.

Competing interests None declared.

Patient consent Obtained.

**Provenance and peer review** Not commissioned; externally peer reviewed.



To cite: Al-ani M, Parperis K. *BMJ Case Rep* Published online: [*please include* Day Month Year] doi:10.1136/bcr-2015-214142



# Images in...

### **REFERENCES**

- Nigwekar SU, Wolf M, Sterns RH, et al. Calciphylaxis from nonuremic causes: a systematic review. Clin J Am Soc Nephrol 2008;3:1139–43.
- Weenig RH, Sewell LD, Davis MD, et al. Calciphylaxis: natural history, risk factor analysis, and outcome. J Am Acad Dermatol 2007;56:569–79.

Copyright 2016 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit http://group.bmj.com/group/rights-licensing/permissions.

BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Become a Fellow of BMJ Case Reports today and you can:

- ► Submit as many cases as you like
- ► Enjoy fast sympathetic peer review and rapid publication of accepted articles
- ► Access all the published articles
- ▶ Re-use any of the published material for personal use and teaching without further permission

For information on Institutional Fellowships contact consortiasales@bmjgroup.com

Visit casereports.bmj.com for more articles like this and to become a Fellow