

# Rivaroxaban induced petechial purpuric rash over chest at precordial chest leads of ECG

Arun Inamadar 

Department of Dermatology,  
Venereology & Leprosy, Shri BM  
Patil Medical College, Bijapur,  
India

## Correspondence to

Dr Arun Inamadar;  
aruninamadar@gmail.com

Accepted 14 June 2022

## DESCRIPTION

A man in his 60s presented to dermatology outpatient department for skin lesions over the chest since 1 day. He was on treatment for deep vein thrombosis. Cutaneous examination revealed six patterned well-defined petechial purpuric rashes over the chest in distribution typical of precordial chest leads ([figure 1](#)). There was no history of itching, pain or bleeding. As there was no significant itching or any personal or previous history of atopy and allergic reactions, the possibility of allergic contact dermatitis to ECG leads was not considered, and a patch test was also not performed. Complete haemogram, platelet count and coagulation profile were normal. A clinical diagnosis of purpuric lesions secondary to ECG chest leads suction balls was made. The patient was administered empirically chewable vitamin C and the lesions subsided within a week without any postlesional events. The causal relation of appearance of purpuric lesions along the precordial ECG leads can be explained by the suction pressure of suction balls of ECG leads with patient being on direct oral anticoagulant rivaroxaban.

The direct oral anticoagulant rivaroxaban is useful in deep vein thrombosis prophylaxis/treatment, after knee/hip replacement surgery and

prevention of stroke in patients with non-valvular atrial fibrillation.<sup>1</sup> Its mechanism of action has been mostly associated with haemorrhage-related adverse effects. Clinicians should be aware of such rare adverse reactions and a proper history regarding the medications should be obtained before ECG recording. There are no such observations published in the available literature and hence the reporting of the image to alert physicians and ECG technicians.

## Learning points

- ▶ Patients on direct oral anticoagulant can develop patterned purpuric lesions along the ECG lead sites.
- ▶ Prior history of anticoagulants needs to be taken whenever suction balls of ECG leads are used for recording ECG.

**Contributors** Planning, writing and searching reference work was done by AI, the sole author of the manuscript.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

**Patient consent for publication** Consent obtained directly from patient(s).

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

Case reports provide a valuable learning resource for the scientific community and can indicate areas of interest for future research. They should not be used in isolation to guide treatment choices or public health policy.

## ORCID iD

Arun Inamadar <http://orcid.org/0000-0002-8877-3723>

## REFERENCE

- 1 Xarelto package insert. Available: <https://www.xareltohcp.com/shared/product/xarelto/prescribing-information.pdf> [Accessed 02 Mar 2022].



**Figure 1** Six patterned well defined petechial purpuric rash over chest in distribution typical V1–V6 chest leads.



© BMJ Publishing Group Limited 2022. No commercial re-use. See rights and permissions. Published by BMJ.

**To cite:** Inamadar A. *BMJ Case Rep* 2022;**15**:e250850. doi:10.1136/bcr-2022-250850

Copyright 2022 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit <https://www.bmj.com/company/products-services/rights-and-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

**Customer Service**

If you have any further queries about your subscription, please contact our customer services team on +44 (0) 207111 1105 or via email at [support@bmj.com](mailto:support@bmj.com).

Visit [casereports.bmj.com](http://casereports.bmj.com) for more articles like this and to become a Fellow