

Terlipressin induced ischaemia of skin

Deepak Sundriyal, Naveen Kumar, Itish Patnaik, Ulka Kamble

Department of Medicine,
PGIMER and Dr RML Hospital,
New Delhi, India

Correspondence to

Dr Naveen Kumar,
docnaveen2605@yahoo.co.in

DESCRIPTION

A 47-year-old man presented to the emergency department with haematemesis and melaena for 1 day. He had a 15 year history of heavy alcohol consumption. On examination, he was icteric; spider naevi were seen and ascites was present. Prothrombin time (test) was 16 s against a control of 13.5 s. The platelet count was within normal range. Oesophago-gastro-duodenoscopy was suggestive of actively bleeding oesophageal varices. He was started on terlipressin therapy 1 mg six times a day. On the third day of therapy he developed cold extremities, bilateral erythematous non-blanching lesions of the extremities, ecchymosis, with areas of necrosis of the overlying skin (figure 1). Injection terlipressin was stopped. Lesions regressed over the course of illness and he made a complete recovery in 2 weeks. As a biopsy was not performed and there was a temporal relation between stopping the drip and regression of skin lesion; the most likely diagnosis we kept was terlipressin induced-vasculopathy leading to skin ischaemia. Terlipressin is a synthetic vasopressin analogue used in the treatment of variceal haemorrhage. Its use has increased as it has prolonged half-life, which enables comfortable bolus administration instead of continuous drip. Although it is specific for splanchnic circulation where it exerts a vasoconstrictive effect, similar effect can be seen in systemic

circulation. The side effects are usually mild: headache, abdominal pain, diarrhoea, acral cyanosis, skin pallor, hypertension, arrhythmia (bradycardia) and electrolyte imbalances.^{1 2} Uncommon and serious complications are ischaemic colitis, myocardial infarction and skin necrosis.^{1 2} In similar previously reported cases including ours, the complication evolved after few days of treatment thus indicating a dose-related effect.² Potential predisposing factors of ischaemic complications are: patients with ischaemic disease, obesity, venous insufficiency and spontaneous bacterial peritonitis.

Learning points

- ▶ Terlipressin should be used with caution in older patients with atherosclerosis, as its ischaemic complications can get precipitated.
- ▶ As ischaemia of skin is a dose-related side effect, its timely recognition can reverse the process.
- ▶ Although rare, the severity of this complication warrants a close watch during terlipressin therapy.



Figure 1 Ischaemic changes in the bilateral lower leg (right>left).

Contributors DS and NK contributed to the management of the patient, concept of the paper, data acquisition, analysis, drafting the article, revising the article and final approval. IP was involved in management of the patient, data acquisition, revising the article and final approval. UK was involved in management of the patient, concept of the paper, analysis, drafting article, revising the article and final approval.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Sahu S, Panda K, Patnaik S, *et al.* Terlipressin induced peripheral ischaemic gangrene and skin necrosis. *Trop Gastroenterol* 2010;31:229–30.
- 2 Yefet E, Gershovich M, Farber E, *et al.* Extensive epidermal necrosis due to terlipressin. *Isr Med Assoc J* 2011;13:180–1.

To cite: Sundriyal D, Kumar N, Patnaik I, *et al.* *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2013-010050

Copyright 2013 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