Terlipressin induced ischaemia of skin

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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 splanich 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. Uncommon and serious complications are ischaemic colitis, myocardial infarction and skin necrosis. In similar previously reported cases including ours, the complication evolved after few days of treatment thus indicating a dose-related effect. 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.

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