

Extravasation and pigmentation post iron infusion

A 54-year-old woman presented to her GP with symptomatic anaemia. She had previously been treated for iron-deficiency anaemia and was intolerant to oral iron. Previous upper and lower gastrointestinal endoscopies were normal. Laboratory investigations revealed a haemoglobin level of 85 g/litre, mean corpuscular volume 81 fl, ferritin 40 µg/litre, iron 5.2 µmol/litre and transferrin 4.12g/litre.

On referral to medicine, ferric carboxymaltose (Ferrinject) was

administered intravenously (Toblli and Angerosa, 2014). The infusion was discontinued as extensive brown discolouration at the injection site was noted (*Figure 1*). This persisted despite conservative measures, including limb elevation and cooling.

Extravasation injuries occur in 0.1–0.6% of adults and precautions are taken for agents known to cause significant injury, such as amiodarone (Reynolds et al, 2014). Hyperpigmentation following extravasation of iron is largely irreversible, although partial responses have been observed with laser therapy (Raulin et al, 2001). It is important

that patients are informed of this potential adverse event as part of the informed consent process. **BJHM**

- Raulin C, Werner S, Greve B. Circumscribed pigmentations after iron injections-treatment with Q-switched laser systems. *Lasers Surg Med.* 2001 Jun;28(5):456–460. <https://doi.org/10.1002/lsm.1074>
- Reynolds PM, MacLaren R, Mueller SW, Fish DN, Kiser TH. Management of extravasation injuries: a focused evaluation of noncytotoxic medications. *Pharmacotherapy.* 2014 Jun;34(6):617–632. <https://doi.org/10.1002/phar.1396>
- Toblli JE, Angerosa M. Optimizing iron delivery in the management of anemia: patient considerations and the role of ferric carboxymaltose. *Drug Des Devel Ther.* 2014 Dec 11;8:2475–2491. <https://doi.org/10.2147/DDDT.S55499>

Dr Mohamad S El-Zaatari, Speciality Doctor, Department of Acute Medicine, Queen Elizabeth Hospital Birmingham, University Hospitals Birmingham NHS Foundation Trust, Birmingham

Dr Zaki K Hassan-Smith, Consultant Endocrinologist, Physician and Visiting Professor, Departments of Acute Medicine and Endocrinology, Queen Elizabeth Hospital Birmingham, University Hospitals Birmingham NHS Foundation Trust, Birmingham B15 2WB

Dr Vinay Reddy-Kolanu, Consultant in Acute Medicine, Department of Acute Medicine, Queen Elizabeth Hospital Birmingham, University Hospitals Birmingham NHS Foundation Trust, Birmingham

Correspondence to: Dr ZK Hassan-Smith (zaki.hassan-smith@uhb.nhs.uk)

Figure 1. Pigmentation of right arm secondary to extravasation of intravenous iron.

