Bullous Lesions in a Haemodialysis Patient

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A 41-year-old lady on haemodialysis secondary to diabetic nephropathy with a history of untreated hepatitis C pre-sents with a 4-month history of painful bullous lesions on both her forearms, shins, feet, face, neck and left pinna. Figure 1 She had been previously independently mobilizing but now severely debilitated by pain. There were no new medications or evidence of systemic infections. Her workup revealed a ferritin of 4790 ug/L, haemoglobin of 110 g/L and elevated urinary porphyrins, and histology of the lesion was in keeping with porphyria cutanea tarda (PCT). The patient was initially treated with a 4-month course of hydroxychloroquine with no effect. A trial of weekly phlebotomy of 180 ml for 2 months during haemodialysis in combination with an increased dose of erythropoietin resulted in rapid resolution of her lesions and pain, ferritin of 450 ug/L and haemoglobin ranging between 90 and 100 g/L without symptoms of anaemia. PCT is normally provoked when the haem biosynthetic enzyme uroporphyrinogen decarboxylase activity in the liver is decreased to below 20%, often from multifactorial causes including familial mutations in the uroporphyrinogen decarboxylase gene, iron overload, hepatitis C infection, alcohol, smoking, oestrogen containing oral contraception and failure to excrete porphyrins, especially in anuric haemodialysis patients, where porphyrins are not fully cleared by haemo-dialysis.^{1,2} Treatment options in haemodialysis patients include small volume phlebotomy with concurrent erythro-poietin, desferoxamine, an iron chelator as well as treat-ment of underlying Hepatitis C. Hydroxychloroquine is usually ineffective in haemodialysis patients and may result in worsening of PCT.^{3,4}

References

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