Epoietin-α-associated total alopecia

Sir,
Adverse effects of erythropoietin therapy including transient myalgia, hypertension, and thrombosis of vascular access are well known. We report a case of total alopecia temporally related to the initiation of therapy with erythropoietin-α.

Case. A 60-year-old man was diagnosed with nephrotic syndrome due to membranous nephropathy in February 1996. His past medical history consisted of hypertension and acne as a teenager. After a poor response to steroids, followed by a 6-month trial of cyclophosphamide, he was commenced on cyclosporin in January 1997.

In October 1998 the patient complained of lethargy and tiredness. Examination was unremarkable, other than blood pressure 150/100. Investigations revealed Hb 8.7, with normal red cell parameters, ferritin 23, folate 6.1, creatinine 240, urea 21.8, corrected calcium 2.20, and phosphate 1.33. He was commenced on epoietin alpha (Eprex) 2000 units twice weekly in November 1998, and this was later reduced to once weekly after the haemoglobin had risen to 11.4 g/dl. The remainder of his medication consisted of bumetanide, simvastatin, lisinopril, cyclosporin, doxazocin, none of which had been changed in the preceding 18 months.

Although he symptomatically improved, within 3 weeks of starting on Eprex he began to experience hair loss. Within 4 months he had developed alopecia universalis, with total head and body hair loss. He had no symptoms of endocrine disease and a thorough examination revealed no abnormality. The only abnormality on extensive laboratory investigation was a slightly low level of zinc at 7.7 μmol/l (normal 12.6–20.0 μmol/l). He was therefore commenced on zinc sulphate supplements; however, there was no improvement of his alopecia after 2 months and this was therefore discontinued.

Alopecia is frequently idiopathic [1], but having excluded the majority of recognized causes, suspicion was directed towards the Eprex. Consequently the epoietin-α was changed to epoietin-β (Recormon) in October 1999. Within 6 months, scanty hair growth had appeared on his cheeks and head. Hair growth has continued since that time.

Comments. Alopecia possibly associated with erythropoietin use has recently been reported in three women [2]. In our case, the close temporal relationship between the initiation of Eprex therapy and the development of total alopecia, together with the exclusion of other recognized causes of alopecia, also suggests a possible adverse drug effect.

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