The use of androgens in anaemia resistant to erythropoietin and i.v. iron in patients with heart and renal failure

Sir,

We read with interest the recent thorough review of use of androgen therapy in the management of renal anaemia [1]. We have been interested in the role of erythropoietin and i.v. iron in the correction of the anaemia seen in patients with congestive heart failure (CHF) [2–6]. Most of these patients also have chronic kidney insufficiency (CKI). In 223 such cases, we attempted to correct their anaemia with the combination of up to 10 000 IU erythropoietin (EPO) given subcutaneously once weekly, and i.v. Venofer (ferric sucrose) given once weekly. We gave the Venofer to patients until either the haemoglobin (Hb) reached target, the per cent transferrin saturation reached 35% or the serum ferritin reached 700 μg/l, whichever came first. We encountered 19 cases (8.5%) (mean age 74.0 ± 6.9 years) (14 males/five females) that failed to reach a target Hb of 13 g/dl over at least 4 months of this treatment, the Hb increasing from a mean of 10.1 ± 1.2 to 11.1 ± 0.8 g/dl. In these 19 cases we administered nandrolone decanoate (ND) 200 mg (one ampoule) once weekly i.m. while continuing the EPO–Fe combination until the target Hb was reached. One male patient developed a skin rash within 24 h after the first dose and was removed from the study. In the remaining 18 cases the mean Hb increased over the next 3 months from 11.1 ± 0.8 to 13.3 ± 0.8 g/dl (P < 0.01). All the patients reached the target Hb by 3 months after ND treatment was started. None of the 18 patients, male or female, complained of any side effects and most noted an increase in appetite. There were no significant changes in serum cholesterol, HDL, LDL, triglycerides, liver function tests or blood pressure. Subsequently the patients no longer required further ND and were maintained on EPO and i.v. Fe as needed. We agree with Navarro that in patients with anaemia and CKI who do not reach target Hb with large doses of EPO and i.v. Fe the short-term addition of ND may rapidly correct the anaemia with minimal side effects. ND seems to be a useful adjuvant in patients receiving EPO for the correction of the anaemia of renal and heart failure who are resistant to therapy.

Conflict of interest statement. None declared.

1Tel Aviv Sourasky Medical Center
Department of Nephrology
Tel Aviv
Israel
Email: donald@netvision.net.il

2Tel Aviv Sourasky Medical Center
Department of Cardiology
Tel Aviv
Israel
Email: donald@netvision.net.il

DOI: 10.1093/ndt/gfg556

Severe anaphylactic reaction in a haemodialysis patient after administration of reviparin

Sir,

Low-molecular weight heparins (LMWHs) are widely used during haemodialysis. We recently observed a patient who developed a severe allergic reaction after administration of an LMWH (reviparin). The patient, a 52-year-old women suffering from end-stage renal disease caused by diabetic nephropathy, started haemodialysis in March 2003. She had a past history of hepatitis C with a severe anaphylactic reaction after administration of interferon-α. From the first haemodialysis session, she experienced serious respiratory problems which required treatment with aminophylline and oxygen. Dyspnoea, cough and wheezing occurred during the dialysis sessions, and she recovered completely after the attacks. Bicarbonate dialysis, 4 h per session, three times per week, with polysulfone dialysers (Fresenius 5) was performed, with no re-use of dialyser. From March to May, reviparin was used as anticoagulant therapy. The patient had never used angiotensin-converting enzyme (ACE) inhibitors. The patient was switched to another polysulfone dialyser brand (Gambro®) after 1 month, but with no improvement in respiratory status. IgE was 588 kIU/l (normal range up to 114 kIU/l). There was no eosinophilia in the peripheral blood. In May 2003, nasal bleeding caused by hypertension occurred requiring posterior nasal tamponade. Her platelets were within the normal range, as were her coagulation parameters. She was then dialysed without reviparin and her overall status significantly improved. She had no respiratory problems. In July 2003, 45 days after the last episode of severe nasal bleeding, reviparin was introduced as anticoagulant therapy. The patient who developed an anaphylactic reaction after administration of reviparin.

After searching the WHO databases and Medline, to the best of our knowledge, this is the first case of a haemodialysis patient who developed an anaphylactic reaction after administration of reviparin. Ueda et al. described an anaphylactoid reaction induced by dalteparin sodium in a haemodialysis patient [1]. We would like to warn colleagues that anticoagulation with LMWH in haemodialysis patients with a known allergic predisposition can cause serious anaphylactic reactions.