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 10000 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.

1 Tel Aviv Sourasky Medical Center, Department of Nephrology, Tel Aviv, Israel
2 Tel Aviv Sourasky Medical Center, Department of Cardiology, Tel Aviv, Israel

Email: donald@netvision.net.il

1. Navarro JF. In the erythropoietin era, can we forget alternative or adjunctive therapies for renal anaemia management? The androgen example. Nephrol Dial Transplant 2003; 18: 2222–2226

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®) was performed, with no re-use of dialysers. 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. 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®) was performed, with no re-use of dialysers. 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. Respiratory distress recurred, this time followed by bullous skin changes on the lower extremities. All symptoms disappeared after discontinuation 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.

DOI: 10.1093/ndt/gfh006
Conflict of interest statement. None declared.

Department of Dialysis
Nikolina Basic-Jukic
Clinical Hospital Centre Zagreb
Zagreb
Croatia
Email: nina_basic@net.hr

DOI: 10.1093/ndt/gfh071

Dialysis: when to start or when to stop?

Sir,

There have been several recent discussions around the timing of initiation of dialysis [1,2]. There remains little scientific consensus on when to start and on which clinical and biochemical parameters we base this decision. In the broadest sense, dialysis should serve to decrease morbidity and/or mortality whilst maintaining or improving quality of life. It is almost assumed that renal replacement therapy will offer this to all. However, an incident dialysis population is heterogeneous and failure to take this into account leads to non-individualized generic care. We must therefore recognize that the optimal time to start dialysis may differ for varied patient sub-groups. Additionally, in those individuals who fail to thrive on dialysis, then withdrawal of therapy has to be considered. This group may further provide insight into those individuals for whom dialysis is altogether inappropriate. These questions are perhaps posed most often when we consider an elderly co-morbid patient with end-stage renal failure (ESRF). Following the introduction of dialysis it has been demonstrated that age correlates with symptom burden on renal replacement therapy [3]. UK Registry data reports a 50% mortality at 1 year in incident dialysis patients over the age of 85 years, with the greatest attrition rate being in the first 3 months [4]. This early mortality may negate any subsequent benefits from an early start. Furthermore, Williams et al. [5] examined 24 consecutive cases in which dialysis was felt to be inappropriate. It was found that even when a conservative approach is taken functional status could be maintained until death is imminent. The following short cases highlight the points that an ‘early start’ may not lead to maintenance, but to deterioration in quality of life. Also, that dialysis can be withdrawn in some with the realistic expectation of an improvement in symptoms and with the preservation of independence making it a viable therapeutic option.

Case 1. An 83-year-old female with ESRF (calculated GFR of 7 ml/min) secondary to renal limited vasculitis commenced haemodialysis (HD) via a native fistula. She achieved a urea reduction ratio (URR) in excess of 65%. Although no haemodynamic compromise occurred, HD left her severely fatigued. Consequently she spent the inter-dialytic interval hospitalized and nursing dependent. Following discussions with the patient, HD was discontinued 5 months after initiation. All other medical therapies were continued. She remains at home 1 year after discontinuation.

Case 2. A 78-year-old female with severe cardiac compromise and ESRF (calculated GFR of 8 ml/min) secondary to diabetic nephropathy commenced HD via a cuffed catheter. She achieved a URR of > 65%. Again, HD left her severely fatigued and following 2 months of hospitalization she discontinued dialysis. She required no further hospital admissions before her death 6 months after discontinuation of HD.

Treatment with renal replacement therapy is no longer restricted to certain populations. We may be guilty of extrapolating benefit into individuals where this may not be the case. Indeed it is conceivable that in some we may cause harm. Any further work into the timing of initiation of dialysis should take into account the heterogeneous nature of the ESRF population and should be extended to cover the other issues raised here, as they are relevant to daily clinical practice.

Conflict of interest statement. None declared.

Renal Unit
Royal Liverpool University Hospital
Liverpool
UK
Email: fen@doctors.org.uk

DOI: 10.1093/ndt/gfh032

Severe ascites following renal transplant biopsy caused by a rupture of a subcapsular lymphocele: treated successfully by retroperitonealization

Sir,

We would like to share our experience of a patient who developed subcapsular lymphocele post cadaver transplant from a paediatric patient. Lymphoceles complicate 18% of renal transplants [1]. They usually occur in the first 6 months following transplant [2]. Lymphoceles are usually diagnosed because of pain over the transplanted kidney, or are found incidentally during investigation of renal failure. They may cause ureteric obstruction [3]. Many treatment regimes have