**Body dysmorphic disorder due to hirsutism in a patient treated with cyclosporin**

Sir,

Currently administered immunosuppression schemes usually include cyclosporin. Cyclosporin has brought about a revolution in patient prognosis and in renal graft survival, but, unfortunately, it has many side effects [1,2]. While physicians are attentive to the more serious and life threatening of these side effects, there are others which, although not life threatening, can compromise the patient’s quality of life. To the latter group belongs hirsutism. The incidence of cyclosporin-induced hirsutism in renal graft recipients is ~5% [1,2].

We describe the case of a 20-year-old male patient with end-stage renal disease due to Alport’s syndrome. After 5 months on haemodialysis, the patient received a renal transplant from his father. On discharge from the hospital, the patient was taking Medrol 56 mg/day, mycophenolate mofetil 1.5 g/day and cyclosporin A 400 mg/day. Over a 3 month period, he developed heavy hirsutism of the face and body, which affected both his mood and his social behaviour. He withdrew from his daily activities, became socially isolated and declared that he would stay at home and stop his education. At that time, his serum creatinine was 1.1 mg/dl. The patient was referred to a psychiatrist and the final diagnosis was body dysmorphic disorder [3]. It must be noted that in our department, a psychiatric examination is obligatory for any transplant candidate. In this case, the examination was done a few months before transplantation and showed no psychiatric disorder. Because of this, and despite the good graft function, cyclosporin was switched to tacrolimus (10 mg/day), an efficient immunosuppressive drug that does not cause hirsutism [1,2,4]. The hirsutism disappeared gradually, and both the mood and behaviour of the patient were restored. One year later, the patient’s serum creatinine is 1.2 mg/dl and the dose of tacrolimus is 5 mg/day.

Although hirsutism occasionally leads to patient non-compliance, our patient was compliant with medications, but he also fulfilled the criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM IV) of the American Psychiatric Association for body dysmorphic disorder [3]. These criteria are: (i) preoccupation with an imagined defect in appearance; if a slight physical anomaly is present, the person’s concern is markedly excessive; (ii) the preoccupation causes clinically significant distress or impairment in social, occupational or other important areas of functioning; and (iii) the preoccupation is not better accounted for by another mental disorder.

Body dysmorphic disorder is a serious situation that needs psychiatric evaluation as it is often accompanied by major depression; suicide attempts are rather common [5]. In conclusion, physicians should take care, not only of directly life-threatening side effects of an immunosuppressive regimen, but also of other side effects that can compromise the patient’s quality of life. In this case, the switch from cyclosporin to tacrolimus was enough to restore the patient’s physical and mental status.

Conflict of interest statement. None declared.

---

Organ Transplant Unit

Hippokratio General Hospital

Theodoros Eleftheriadis

Thessaloniki

Greece

Email: elefthe@otenet.gr

Aphroditi Avdelidou

Konstantinos Ioannou

Gregorios Miserlis

Fillio Solonaki

Andreas Papagiannis

Dimitrios Takoudas

---


---

**Tenofovir-induced acute renal failure in an HIV patient with normal renal function**

Sir,

Tenofovir is a nucleotide reverse transcriptase inhibitor widely used to treat HIV infection. Some cases of acute tubular necrosis and Fanconi’s syndrome have been reported, but the drug is usually not considered as nephrotoxic. We would like to report here a first case presenting as acute renal failure related to tenofovir, leading to chronic dialysis.

Case. A 39-year-old white man, with an HIV infection diagnosed in 1999, was admitted in June 2003 with acute renal failure. Two months prior to admission his renal function was normal, with a serum creatinine of 0.81 mg/dl (72 μM) and a creatinine clearance of 100 ml/min. HIV infection was asymptomatic with a CDC classification of A2, and he was treated with lamivudine, zidovudine and abacavir (600 mg/day). Two weeks later, the patient had an episode of vomiting. His serum creatinine was 2.67 mg/dl (237 μmol/l). Because of deteriorating renal function, he was admitted to hospital 1 week later.

Physical examination showed a well-hydrated and normotensive man. He was oliguric and had no rash.

Laboratory data showed renal failure (blood urea nitrogen 80 mg/dl, creatinine 11.7 mg/dl) and metabolic acidosis (bicarbonate 11 mmol/l). Electrolytes, liver tests and blood formula were within the normal range without hyperkalemia. The urinalysis revealed proteinuria (1 g/day), haematuria (27 cells/μl), leukocyturia (291 cells/μl), no crystals and some peeled epithelial cells. The fractional excretion of sodium was 4%.

---

doi:10.1093/ndt/gfh635
Renal ultrasound was normal and renal histology revealed a typical aspect of acute tubular necrosis with vacuolation of the proximal tubular cells and no evidence of focal or global glomerulosclerosis.

The antiretroviral treatment was withheld and intermittent haemodialysis was started. Despite optimal hydration, renal function did not improve. One year later, he is now on peritoneal dialysis with a viral load of 50 copies/ml and a CD4 count of 350 cells/mm$^3$. His actual antiretroviral treatment is stavudine, didanosine and nelfinavir.

Comment. This patient had no other cause of acute renal failure and the chronology strongly suggests the imputability of tenofovir. Indeed, abacavir has only been responsible for acute renal failure associated with hypersensitivity reaction [1] and no pharmacokinetics interaction that could lead to drug accumulation or enhanced toxicity was identified.

Until recently, the renal tolerance of tenofovir, ≤300 mg/day, was considered excellent. Occasional reports of Fanconi’s syndrome (0–3%) or renal failure have been mentioned in survey studies (tenofovir studies GS-00–902 and GS-00–907, Gilead Sciences, 2000) with a similar incidence of renal dysfunction in the placebo groups. In the literature, only five case reports of tenofovir-induced tubular necrosis have been published and serum creatinine improved in all cases after drug cessation [2–5]. This report highlights the nephrotoxicity of tenofovir, which can be severe enough to lead to end-stage renal disease and to require chronic dialysis. Practitioners should be aware of this potential adverse reaction and monitor renal function closely, particularly at the start of the treatment, even in patients with normal renal function.

Conflict of interest statement. None declared.


doi:10.1093/ndt/gfh640

Right atrial thrombus as a complication of a temporary haemodialysis catheter—a potentially avoidable complication

Sir.

The formation of right atrial thrombus (RAT) has been reported in adults as a complication of tunnelled cuffed haemodialysis catheters [1,2] and untunnelled central venous catheters used for non-dialysis indications [3]. We describe the first case of RAT and its management complicating a temporary haemodialysis catheter which had been in situ for 8 weeks, 5 weeks more than the current recommendations [4].

Case. A 39-year-old man with diabetic nephropathy complicated by interstitial nephritis presented with acute renal failure and required urgent haemodialysis. He commenced haemodialysis via a KIMAL 11.5 French 15 cm precurved right temporary internal jugular catheter. He received standard intradialytic heparin with a bolus of 2000 U and 1500 U hourly. The temporary catheter was left in situ and not converted to a tunnelled catheter both as it was initially hoped that renal function would improve rapidly and because the patient’s long-term goal was for peritoneal dialysis. Eight weeks after insertion of the catheter, he presented with a 2 week history of fever, malaise and arthropathy. Examination revealed a pyrexia of 37.6 °C. Serum white cell count was 10.7 × 10$^9$/l and his C-reactive protein was 26 mg/l. A chest radiograph showed there was no focus of infection and the catheter tip was high in the right atrium. The patient was not on antimicrobials, and one set of blood cultures was negative. The differential diagnosis was of an inflammatory arthritis or a reaction to Venofer. The catheter was not removed. On the day after admission, a quiet, pan systolic murmur was detected.

An urgent trans-thoracic echocardiogram (TTE) was obtained and showed a large mass adherent to the right atrium. The decision was made to proceed to sternotomy and cardiotomy for examination and removal of the mass. It was felt that attempted thrombolysis may dislodge any thrombus and could cause a fatal pulmonary embolus. The operative findings were of a 4 × 3 cm mass firmly adherent to the right atrial wall. The dialysis catheter was located in the middle of the mass. The mass was removed and the patient made an uneventful recovery. Post-operative examination of the mass showed that it was pure thrombus.

Discussion. There have been 22 cases of RAT reported as a complication of the use of tunnelled cuffed haemodialysis catheters [5]. The presence of infection was associated with a higher mortality of 33% compared with 14% in subjects without infection. The optimal management of dialysis catheter-associated RAT is unclear. Thrombectomy has been reported to be associated with a lower mortality compared with conservative management with anticoagulation and antibiotics; however, this may reflect selection bias, with more stable patients undergoing surgery [5].

It has been suggested that if the thrombus is small (<2 cm), anticoagulation is needed for 6 months followed by a repeat echo and catheter removal. In the presence of bacteraemia, the catheter would be removed first followed by anticoagulation. If the thrombus is larger than 2 cm, especially in the presence of infection, urgent thrombectomy together with antibiotics and anticoagulation should be considered [5].

A recent review [6] has suggested that if haemodialysis is likely to be required for 14 days or more, a tunnelled cuffed catheter (TCC) should be used instead of a temporary