functions of the natural kidney. Till then, ‘renal support therapy’ would convey more effectively the limitations of current technology. This also has significant relevance in patient education. The current term gives the incorrect impression that health care providers have mastered renal failure. Patients need to understand that dialytic therapies cannot substitute the functions of a normal kidney, but are useful as a life support system. (Of course this is no mean achievement in a patient with a major organ failure.) The new term will reinforce the importance of preventing/slowing the progression of chronic kidney disease and also help patients cope with the problems of treatment in a better way. We hope that this matter is actively discussed by the nephrology community.

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Cytomegalovirus peritonitis after renal transplantation under induction therapy with alemtuzumab in a young woman previously treated with peritoneal dialysis

Sir,

Cytomegalovirus (CMV) disease represents a frequent opportunistic infection in immunocompromised patients leading to severe organ involvement such as hepatitis, colitis, pneumonia and other more unusual manifestations [1].

Case. A CMV-seropositive, 37-year-old woman who was on chronic peritoneal dialysis since April 2001 because of shrunken kidneys of unknown origin was transplanted with a cadaveric kidney from a CMV-seronegative donor in November 2004. The patient was assigned to an induction therapy with the anti-CD-52 antibody alemtuzumab combined with methylprednisolone, followed by a sequential immunosuppressive monotherapy with tacrolimus. The kidney transplant showed initial function and the patient was discharged with a stable serum creatinine level (1.17 μmol/l) level on day 9 after renal transplantation.

On day 30, the patient was re-admitted because of stabbing abdominal pain. Physical examination showed an irritated abdomen with some diffuse tenderness. Gynaecological examination, ultrasound scan and urine analysis were uninformative. The exit side of the peritoneal catheter, which temporarily remained in situ after transplantation, was inconspicuous. The muddy and light bloody peritoneal fluid was saved for bacterial culture while a leukocyte test strip was 2-fold positive. The biological parameters including C-reactive protein were largely unremarkable, but blood count revealed significant leucopenia (2.0 thousand/μl). Notably, routine whole blood CMVpp65 antigen was negative. Despite antibiotic therapy with pipercillin and frequent peritoneal dialysis, the abdominal pain remained stable and the leukocyte count further decreased to 1.3 thousand/μl on day 33. We therefore retested CMVpp65 antigen which increased to 122 positive from 400 000 leukocytes. Subsequently, we proved viral peritonitis while performing quantitative reverse transcription-polymerase chain reaction (RT–PCR) of the culture-negative peritoneal fluid, which revealed >25 000 000 CMV copies/ml. Intravenous ganciclovir treatment (150 mg twice daily) resulted in a decrease of CMVpp65 antigen and viral DNA load within the following days while clinical symptoms vanished. On day 49, the patient was discharged with normal leukocyte numbers and stable renal function after peritoneal catheter removal was successfully performed.

Discussion. Little is known about the frequency of viral peritonitis [2]. CMV DNA was identified previously in peritoneal fluid of potential kidney transplant recipients treated with peritoneal dialysis [3]. In our patient, the risk of CMV disease was possibly increased due to the positive CMV status of the recipient and the intense immunosuppressive therapy including alemtuzumab. Opportunistic infections and malignancies have been of grave concern with this potent lymphocyte-depleting agent [4]. The leading clinical signs in this case were abdominal pain and persistent leucopenia. Notably, positive CMVpp65 antigen was only detected after the diagnosis of CMV peritonitis was established by high quantitative RT–PCR [5].

In summary, we here report viral CMV peritonitis after renal transplantation. Meticulous systemic CMV monitoring using CMVpp65 antigen initially failed to identify CMV peritonitis, an emerging and probably underdiagnosed complication of CMV disease.

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