

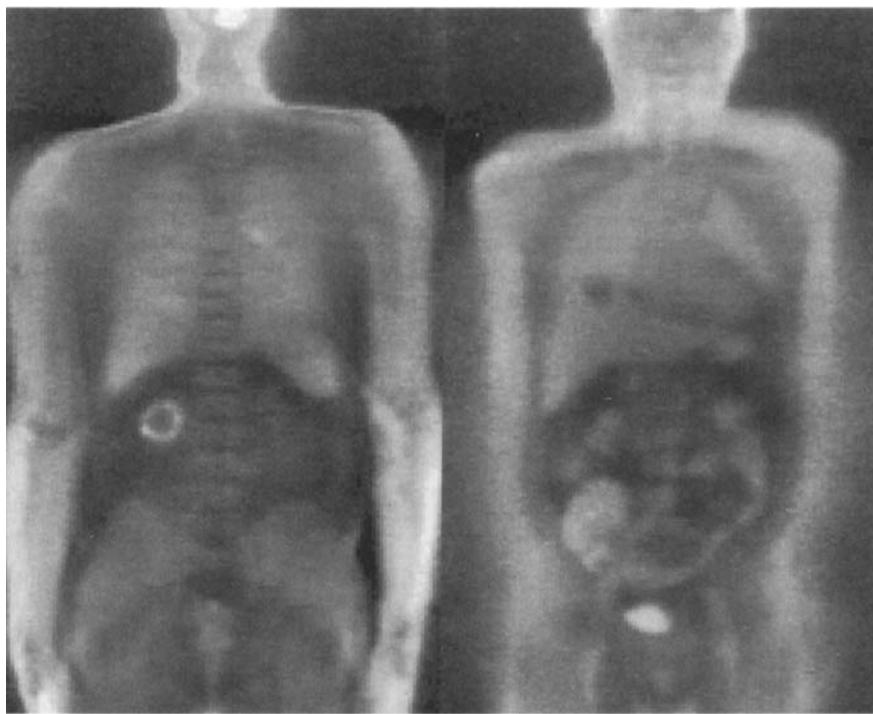
Ziya Kaya  
Joerg Kotzerke  
Frieder Keller

## FDG PET diagnosis of septic kidney in a renal transplant patient

Received: 28 December 1998

Accepted: 2 February 1999

**Sir:** Localization of septic foci is often difficult. We would like to report on our recent experience with a 61-year-old patient who was admitted with fever and rising serum creatinine (from 180 to 450 µmol/l). Having suffered from end-stage renal disease due to Balkan nephropathy since 1992, he received a kidney transplant in 1994. Because of oliguric renal failure, he now needed hemodialysis. The biopsy of the kidney transplant disclosed purulent bacterial interstitial nephritis. He was treated with piperacillin, tazobactam, and gentamicin. After discontinuation of antibiotics, fever reappeared. *Escherichia coli* infection was diagnosed, but no focus could be found by ultrasonography, or computed tomography. Only by 18F-fluorodeoxyglucose positron emission tomography (FDG PET)



**Fig. 1** The septic focus in the original right kidney (left) was diagnosed by FDG PET. Kidney transplant still eliminated FDG (right)

could a renal abscess of the original right kidney be disclosed (Fig. 1). The infected original right kidney was removed by nephrectomy. The patient's clinical condition immediately improved, serum creatinine returned to 210 µmol/l, and he could be discharged.

F. Keller (✉)  
University Hospital,  
Department of Internal Medicine II,  
Division of Nephrology,  
Robert Koch Strasse 8,  
D-89070 Ulm, Germany  
Fax: + 49 731 502 4483  
E-mail: frieder.keller@medizin.uni-ulm.de