Dear Sir,

Living-related kidney donation is a matter which involves many ethical and medical aspects. In Saudi Arabia most of the kidney transplants are from living-related donors because of the limited supply of cadaveric kidneys; the general impression being that kidney donation is safe for the donor provided careful evaluation has been done.

Recently, we saw a 30-year-old man who was on dialysis 6 years after donation of his kidney to his brother. His brother had end-stage renal disease of unknown etiology at the age of 24 years, 8 years ago. He received the kidney from his brother at another hospital in Jeddah and the transplant was uneventful. In fact, his creatinine had been in the range of 200 µmol/l (2.27 mg/dl).

The donor presented to us 3 months ago feeling unwell, tired and had easy fatigability with paresthesia of the hands and feet. On examination, he was unwell and pale. His JVP was 3-4 cm. Blood pressure 140/90 mm Hg. The rest of his cardiovascular examination was unremarkable. Chest was clear and abdominal examination was normal. CNS examination was also normal.

Laboratory data showed his creatinine to be 850 µmol/l, urea 36 mmol/l, Na 137, K 4.9, bicarbonate 14.0 mmol/l, Ca 1.4 mmol/l, P 2.04 mmol/l, alkaline phosphatase 117, liver function normal, Hb 7.5 g/dl, MCV 80.5, WBC 6.5, platelets 224 and PTH 417.

Ultrasound of the right kidney showed the size was 10.5 cm with a very thin cortex with increased echogenicity but no hydronephrosis. Urinalysis showed proteinuria ++, hematuria ++ and granular and hyline casts. Chest x-ray was normal. Echocardiogram was normal. ECG was normal. Audiometry was normal.

A diagnosis of chronic renal failure was made and an A-V fistula on the left arm was established. He was put on vitamin D and calcium supplement. A kidney biopsy was not done because of the thin cortex.

This patient was started on hemodialysis 2 months later 3 times weekly.

This patient ended up on dialysis after a living-related donation to his brother. A thorough evaluation of the donor was done 6 years ago and according to hospital records no evidence of abnormalities was noted.

It is possible that this patient had a hereditary nephritis or he had glomerulonephritis on top of a single kidney and therefore the damage was more.

This case raises ethical issues of living-related donation. Although living-related donation is safe and usually carries no complications to the donor, this case is an exception.
It raises more ethical issues about living-related donations since there is still the possibility of disastrous complications.