

Table 1. Patient characteristics and their association with BDI scores ≥ 15 (* $P < 0.05$)

	BDI ≥ 15 (N = 20)	BDI < 15 (N = 40)	P-value
Age	49 \pm 19.64	44.7 \pm 15.12	0.27
Gender (M/F)	6/14	16/14	0.02*
Duration of dialysis (months)	63.5 \pm 51.43	68.8 \pm 59.49	0.40
BMI (kg/m ²)	23.51 \pm 5.55	24.49 \pm 4.73	0.11
Education			
Primary	20%	20%	0.50
Secondary/tertiary	50%	45%	0.45
Higher education	10%	25%	0.02*
Uneducated	20%	10%	0.07
History of transplant	0/20	1/40	0.43
Diabetes mellitus	10%	10%	0.50
Marital status			
Single	30%	20%	0.07
Divorced	0%	15%	0.02*
Widowed	30%	5%	0.01*
Married	40%	60%	0.01*
Employment			
Employed	0%	20%	0.04*
Unemployed	100%	80%	0.04*
Malnutrition–inflammation score (MIS)	9.8 \pm 3.25	7.55 \pm 4.63	0.06
Serum albumin (g/dl)	3.78 \pm 0.47	3.82 \pm 0.45	0.40
Haemoglobin (g/dl)	9.18 \pm 1.26	9.47 \pm 1.78	0.30
Urea reduction ratio (URR)	66.2 \pm 7.25	66.65 \pm 4.93	0.43
Blood urea (mg/dl)	162.10 \pm 38.56	164.18 \pm 40.10	0.41
Serum creatinine (mg/dl)	7.30 \pm 2.02	8.89 \pm 3.15	0.39
Serum calcium (mg/dl)	8.79 \pm 0.59	8.71 \pm 0.69	0.48
Serum phosphorus (mg/dl)	5.52 \pm 1.03	5.44 \pm 1.20	0.47
F-36 total scores	58.94 \pm 13.09	69.90 \pm 9.63	0.01*
F-36 mental component	59.54 \pm 13.70	71.39 \pm 9.85	0.01*
F-36 physical component	58.92 \pm 13.57	66.76 \pm 11.10	0.06

Based on our findings, we propose the routine use of simple screening tools like BDI, MIS and F-36 form to identify patients at high risk for hospitalization and poor outcome. Such vulnerable patients should receive more counselling, social support and specialist referral for treatment of depression.

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Valproic acid overdose and continuous venovenous haemodiafiltration

Sir,

Valproic acid (VA) is a frequently used drug with an increase in fatal overdoses [1]. Coma, respiratory failure, cerebral oedema, pancreatitis and impairment of mitochondrial β oxidation can be seen in severe poisoning [2]. Treatment mainly consists of supportive care. Extracorporeal elimination of VA can be considered. The use of haemoperfusion and haemodialysis (HD) have been reported, but with conflicting results. We report a case of severe VA

Table 1. Valproic acid blood and ultrafiltrate concentrations, clearance, and sieving coefficient.

	ICU admission Hours after start of CVVHDF		
	0	4	8
Valproic acid concentration, µg/mL			
Blood	1664	943	758
Ultrafiltrate			335
Valproic acid clearance, mL/min	11		303
Sieving coefficient	0.44		

overdose, where continuous venovenous haemodiafiltration (CVVHDF) led to a significant decrease in blood levels. A 54-year-old woman was admitted to our intensive care unit after a VA overdose. She was unconscious and required mechanical ventilation. Blood VA level on admission was 1664 µg/mL. The patient's condition progressively worsened. The day after admission, she demonstrated most of the VA poisoning symptoms. Despite supportive care, her status deteriorated, leading to multiple organ failure. CVVHDF was initiated for acute renal failure and anuria with an AN69 hollow-fibre dialyzer of 0.9 m² (Hospal, Lyon, France), using the predilutional method, with blood flow set at 120 mL/min. The dialysate and substitution fluid rates were 1000 mL/min and 2000 mL/min, respectively (Hemosol, Hospal, Lyon, France). Arterial blood samples were collected from the sampling point of the dialyzer, which is at a point before the blood passes through the haemofilter. Paired ultrafiltrate samples were collected. VA concentration was measured by a fluorescence polarization immunoassay. VA clearance was determined as $Cl = [C_{UF} * V_{UF}] / [C_A * t]$ where C_{UF} and C_A are ultrafiltrate and arterial serum VA concentrations at the midpoint of the time of collection, respectively; V_{UF} is ultrafiltrate volume and t is the time of collection. The sieving coefficient (Sc) was calculated as $Sc = C_{UF} / C_A$ (Table 1).

VA is a small (144 Da), water-soluble molecule with a volume of distribution ranging from 0.1 to 0.5 L/kg. At therapeutic levels, VA is almost completely bound to plasma proteins; thus drug removal by extrarenal euration is negligible. In the case of overdose, a much larger percentage of VA is unbound and so accessible to extrarenal euration techniques [3]. Johnson [4] reported that the use of HD with a high dialysate flow rate (800 mL/min) is effective in obtaining excellent clearance of the drug (>80 mL/min). Hicks [5] found a marked decrease in serum VA occurring after 7.7 h of HD, and an improvement of VA half-life from 31.3 to 2.25 h. HD can be difficult to perform (particularly with high blood or dialysate flow rates) in patients with haemodynamic instability. In such a case, continuous renal replacement therapies may be an alternative, but very few data are available on their efficacy. Our results suggest that CVVHDF, although less effective than HD, significantly lowers VA blood concentration in the case of overdose. Indeed, no definitive conclusion about the clinical usefulness of this technique can be drawn from these data.

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Renal artery aneurysm in a cadaveric donor kidney

Sir,
Aneurysms of the renal artery are rare and have an estimated incidence of 0.09% in the general population [1]. Although rare, they are more commonly found in the fourth to sixth decades of life. With increasingly more donor kidneys being retrieved from an older population, it is important to be aware of this uncommon but serious condition. The literature is scarce on the incidence of renal artery aneurysm in donor kidneys. We present a case of a complex renal artery aneurysm, being incidentally found in a cadaveric donor kidney.

Case

We were offered a left cadaveric kidney from a 69-year-old female, retrieved by a different unit in the country. The cause of brain death was a large intracerebral haemorrhage. The donor was known to have hypertension that was well controlled with co-amiloride, a normal kidney function and no other significant medical history. On retrieval, the left kidney was found to have one artery and two veins.

While preparing the kidney prior to transplantation, we found a 1.5 cm, saccular, thin walled aneurysm close to the hilum of the kidney that had not been noticed during retrieval (Figure 1). The aneurysm was located at the branch point of the renal artery into multiple small branches; these were all aneurysmal as well. It was deemed surgically impossible to reconstruct all of these aneurysmal vessels and hence the kidney was not used for the purpose of transplantation. As there was consent for the purpose of research, the aneurysmal segment was excised and sent