Empirical indications for pre-transplant kidney biopsy to deceased donors

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Case Study: Introduction: Kidney transplantation to treat end-stage renal disease has evolved rapidly from the first successful transplantation to current widespread use of grafts from both cadaveric and living donors. Because of the limited supply and increasing demand, many patients needing transplants do not receive them. Expanded criteria donors (ECD) are increasingly being used to solve organ donation shortages. In order to assess kidney state, the pre-transplant donor kidney biopsy (PTDB) procedure is justified. So, we report our experiences of PTBD procedure to deceased donors.

Case 1. The kidney donor was a 54-year-old women brain dead due to subarachnoid hemorrhage. Her underlying disease is diabetes mellitus and hypertension on medication. Her serum creatinine was normal and HbA1c level is 6.4%. But her kidney may have a diabetic nephropathy. So we decided to do pre-transplant donor kidney biopsy. Fortunately, histological examination was normal.

Case 3. A 21-year-old man admitted to our hospital who was unconscious. His initial serum creatinine level was 3.06 mg/dl and the urine output was rapidly decreased with severe metabolic acidosis. He treated for continuous renal replacement therapy (CRRT). But his brain function was not recovered due to convulsions with unknown origin. So we had carried further history from his family. His final diagnosis was ethylene glycol poisoning. We did not proceed to donate his kidney.

Discussion: The long-term survival of single or dual kidney grafts from expanded criteria donors is improved by evaluating histologically characteristics before transplantation.

3 cases biopsy
R/O diabetic nephropathy

Ampetamine drug intoxication