Hyperkalemia in potential deceased donor do we need a correction? : A case report

Imaduddin Izzati¹, Pg Komala Devi¹, Mohd Shah Diana², Ramli Rafizanur³
¹TOP Team Hospital Ampang, ²National Transplant Resource Center, ³CRC Hospital Ampang

ABSTRACT

Introduction: The organ donation process requires a lot of effort from potential deceased donor detection until successful transplantation. One of the most critical phases is managing the donor itself which requires haemodynamic stability before going to the procurement process. In comparison to other parts of the world which practice global brain death assessment, Malaysia is one of the countries that diagnoses brain death based on brain stem assessment (Consensus of Brain Death 2003).

Methods: A case of 27-year-old lady diagnosed with arterial-venous malformation with spontaneous intracranial bleeding and obstructive hydrocephalus suspected to cause brain death became an actual donor of kidneys, liver and both corneas. All data from admission till the procurement process was collected and reported. In this case, the main focus was on potassium level management prior to brain death assessment. Results: Upon admission to the ICU, the patient developed hyperkalemia with potassium of 5.8mmol/L and unnecessary correction with a lytic cocktail was administered. The patient persistently became hypokalemic for the next 24 hours, hence needing further potassium correction before proceeding with a brain death assessment. Despite a delay in determining brain death, the procurement process was uneventful. Conclusion: The action of unnecessary correction of electrolyte effect on maintaining the donor thus prolongs the process of organ procurement. Furthermore, the longer time taken in the maintenance of organ donor will negatively affect the quality of their organs. A new and updated guideline needs to be established for brain death consensus.