Asian Transplantation Week 2023

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Conrad Seoul, Korea

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Session : Concurrent Symposium 1 (Kidney/Pancreas)
Date & Time, Place : November 17 (Fri), 08:00-09:30, Room 3F-1
Session Title : Kidney allograft in multi-organ transplantation

How to manage heart allograft in heart-kidney transplantation - Heart

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Perioperative management of simultaneous heart-kidney transplant (SHKT) entails the management of intraoperative hemodynamics by avoiding hypotension and hypovolemia – major factors contributing to delayed kidney graft function. The use of inotropes, vasopressors, and volume repletion as needed should be used to maintain adequate blood pressure and avoid volume depletion. Patients with arteriovenous (AV) fistula are at risk for left-to-right shunting causing increased cardiac output and decreased diastolic pressure, leading to right ventricular distension and compromised coronary perfusion during and after weaning from cardiopulmonary bypass. Temporary closure of AV fistula with an inflatable cuff can help prevent excessive flow from shunt and deleterious effects, and allow successful weaning off bypass. Post heart transplant, but before and during the kidney transplant procedure requires management of a hyperdynamic, vasodilatory state (vasodilation due to inflammatory response with CPB, ischemia-reperfusion injury, and surgical trauma). Surgical sequence is still a matter of debate. Staged sequence refers to the allowance of perioperative recovery and hemodynamic stabilization following heart transplantation in the ICU, with subsequent return to the OR for kidney transplantation. Non-staged sequence is defined as when heart transplantation is followed by kidney transplantation within the same operation and permits a shorter ischemic time for the kidney graft. Optimal induction and long-term immunosuppression remains to be determined by further studies.