Evaluation of an autotransplant pig kidney a new renal reperfusion model for the study of ischemia/reperfusion injury in porcine

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Ischemia-reperfusion injury (IRI) is associated with an increased risk of acute rejection, delayed graft function, or chronic graft dysfunction in transplanted organs. However, optimal conditions for organ preservation-reperfusion have not yet been established. The aim of this study is to evaluate efficacy of extracorporeally a new renal reperfusioned pig kidney model in porcine,. we investigated whether there was a difference regarding blood pressure between aorta versus femoral artery.

Blood pressure was measured in the femoral artery, aorta, and common carotid artery by use of a pressure control unit after general anesthetsia. The kidneys were harvested, cold flushed, and preserved for 48hours at 4℃ with HTK solution. Using an extracorporeally autotransplant porcine renal reperfusionpig kidney model, we investigated antioxidant enzyme activity after reperfusion.

No difference was observation between femoral arterial and aortic pressure. After IRI, antioxidant enzyme activity was decreased.

This experimental study shows that a new porcine renal reperfusion modelautotransplant pig kidney model, may be effective in study of IRI. More investigations are needed to evaluate IRI in this setting.

Key words: Ischemia-reperfusion injury, renal reperfusion modelautotransplant kidney model, pigporcine, blood pressure, cold storage

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