Transplant Survey

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Re: Retro-peritoneal Cooling for Kidney Preservation from Multi-organ Cadaver Donors

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EDITORIAL COMMENT

Good organ preservation is the key to successful organ transplantation and adequate cooling of organs plays a major role in the preservation. However, in the era of multi-organ retrieval, the kidneys are usually the last organs to be procured as they are considered the most resistant to warm ischemia. In spite of cold perfusion and the application of intra-abdominal ice, retroperitoneal warming of kidneys from the psoas muscles somehow cannot be prevented from the posterior aspect of the kidneys. The right and left kidneys of the 21 deceased donors undergoing multi-organ procurement were randomized to either the experimental group where a bag constructed of surgical sponge, tied in its four corners was filled with ice and placed between the kidney and the psoas muscle, versus the control group where the kidney between the experimental group and control group (8 °C vs 11.6 °C). The clinical significance of this reduction in extraction temperature remains uncertain, and no clinical outcomes are reported. The technique is simple, reproducible, low-risk, and does not bring any additional cost, thus, larger randomized controlled studies focusing on the clinical outcomes would be planned using this technique.

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