

25th Global

DIABETES SUMMIT AND MEDICARE EXPO

December 04-05, 2017 Dubai, UAE



Xiuwu Han

Capital Medical University, China

Laparoscopic Pancreas Transplantation with A Pig Model

Background: Simultaneous pancreas kidney transplantation is a way to treat diabetic renal failure. Pancreas transplantation has experienced more than 40 years of development, its effect is much lower than kidney, liver transplantation, and even lower than the heart transplant. One of the main hurdles to expansion of pancreas transplant is maybe the problem of the surgery itself. Commonly performed pancreas transplantation is heterotopic transplantation in the iliac fossa, pancreatic external secretion can only go to the bladder or the lower small intestine. With kidney, 2 organs within the pelvic cavity, more complication, sexual influence as well as the psychological impact of heterotopic transplantation influence the long-term survival of pancreatic graft.

Method: We believe that new strategy for pancreas transplantation should be explored by laparoscopy. Upon experiences of laparoscopic orthotopic kidney transplantation with pig model, we tried a initial research of laparoscopic pancreas transplantation with a pig model. The research consist of 3 cases of laparoscopic pancreas transplantation and 4 cases of simultaneous pancreas-kidney transplantation. The standard open retrieval technique for pancreas transplant was used. Approximately 5–10 cm of the graft duodenum with the pancreas were retrieved. The pancreatic vein was anastomosed end-to-end to the native right renal vein and the pancreatic artery was anastomosed end-to-end to the native right renal artery laparoscopically after right nephrectomy. Graft duodenum was anastomosed with recipient duodenum or proximal jejunum.

Results: The venous anastomotic time was 50 minutes (35–89 minutes). The arterial anastomotic time was 20 minutes (15–35 minutes). An immediate viable blood supply was seen in the 7 pancreatic grafts during the operation by the appearance of a bright red color. All the 7 pancreatic grafts had autopsy-proven reliable artery and 6 out of 7 vein anastomoses.

Conclusions: This study comprised only initial practices of the laparoscopic pancreatic transplantation. Our study shows the laparoscopic pancreas transplantation may be not impossible in pigs.

Biography

Xiuwu Han has completed his PhD from Capital Medical University, Beijing, China. He is the Director of Department of Urology, Beijing Chaoyang Hospital Affiliated to Capital Medical University (western campus) Beijing 100020, China. He is vice professor of Capital Medical University. He has almost 30 years of experience in urology and more than 20 years of experience in kidney transplantation. He has published more than 50 pieces of medical papers in reputed journals and has been serving as an editorial board member of repute.

xiuwuhan@163.com

Notes: