2017 CST-Astellas Canadian Transplant Fellows Symposium

Expanding the Donor Pool - The evolving field of Organ Preservation and Resuscitation

Markus Selzner, MD

Dr. Markus Selzner graduated from medical school at the University of Münster, Germany, in December 1993, and completed his residency in the Department of Surgery at the University of Cologne between 1994 and 1997. In 1997, Markus went to the Duke University Medical Center in North Carolina for a three-year research fellowship, under the mentorship of Pierre-Alain Clavien, focusing on hepatic reperfusion injury. In 2000, he continued his residency at the Department of Visceral and Transplantation Surgery at the University Hospital of Zurich, Switzerland, and was board certified in surgery in 2002. After his residency, Dr. Selzner completed a clinical fellowship in liver/pancreas surgery and liver transplantation in Zürich between 2003 and 2005, and was appointed Assistant Professor of Surgery and Surgical Attending at the University of Zürich in 2003. After his fellowship in Zürich, Markus sought after more in-depth training in transplant surgery. Between 2005 and 2007, he completed a second Abdominal Organ Transplant Fellowship at the Toronto General Hospital in Toronto. Following his fellowship in Toronto, Markus was appointed Clinical Associate at the University of Toronto in 2007. Dr. Selzner was appointed Assistant Professor of Surgery in July 2009, and he was promoted to Associate Professor at the University of Toronto in June 2015. Dr. Selzner's research interests have been focused on ischemia and reperfusion injury of the liver. During his research fellowship at the Duke University Medical Center, he investigated the activation of apoptotic pathways after warm and cold ischemic injury. After his fellowship, he continued his research by evaluating mechanisms of reperfusion injury in diseased livers, such as steatotic or aging livers. During his clinical fellowship in Toronto, Markus became interested in normothermic ex vivo liver perfusion as a new strategy for the preservation, assessment, and repair of marginal grafts. He has built up a preservation injury research group in Toronto (Toronto Organ Preservation [TOP] Laboratory) and developed a model of (sub)normothermic ex vivo liver perfusion. The group is investigating the impact of warm perfused liver preservation on the outcome of livers retrieved after cardiac death (DCD). In addition, it is exploring this new technology as a platform to assess graft function prior to transplantation, and to modify liver grafts during the preservation period. Recently, the TOP team extended their model to normothermic ex vivo kidney perfusion, and are evaluating the effects of warm perfused kidney preservation on delayed graft function after kidney transplantation in a pig model.

Disclosure

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