

JOINT EVENT ON
INTERNATIONAL CONFERENCE ON CANCER RESEARCH & DIAGNOSTICS
&
16TH ASIA PACIFIC BIOTECHNOLOGY CONGRESS

August 15-16, 2018 Singapore

Device for restricting blood flow: Intracorporeal Pringle's maneuver for laparoscopic liver resection

Kung-chen Ho

Mackay Memorial Hospital, Taiwan

Intraoperative blood loss is a major concern during liver resection, and intraoperative blood transfusion is a significant predictor of disease-free and overall survival after liver resection, whether opened or laparoscopic method. Pringle's maneuver is presently a useful method to reduce blood loss and decrease operative time. Generally, we performed Pringle's maneuver with Hemostatic forceps during liver resection of opened method. However, it is difficult to apply a sufficient and effective Pringle's maneuver under laparoscopic approach due to the narrow space. The aim of this study is to design a simple, secure, and safe technique of intracorporeal Pringle's maneuver to facilitate safer laparoscopic liver resection. The device of loop was designed with two components, consisted of a lock and a plastic tube. The tip of the plastic tube was inserted into the lesser sac and pulled through the foramen of Winslow, and the tip was then inserted into the lock, forming loop around hepatic pedicle. The plastic tube was pulled to occlude the hepatic inflow and temporarily fixed with lock. Then, we would tighten the lock with self-designed screwdriver to keep the loop tension. In animal experiments, we applied Doppler ultrasound to make sure that blood flow was blocked completely. Our self-designed device intracorporeal Pringle's maneuver can facilitate safer laparoscopic liver resection.

Biography

Kung-chen Ho is currently the attending staff of Department of General Surgery, Mackay Memorial Hospital, Taiwan. He has completed his post-graduate study in Medicine from the Kaohsiung Medical University, Department of Post-Baccalaureate Medicine, Kaohsiung, Taiwan. He has completed his MS in Biomedical Engineering in 1997 from National Yang-Ming University, Department of Biomedical Engineering, Taipei, Taiwan and BS in Physics in 1995 from National Sun Yat-sen University, Department of Physics, Kaohsiung, Taiwan. His research interests include biomedical engineering or biophysics, ultrasonic imaging, hemodynamics and surgery, gastrointestinal surgery, hepatobiliary and pancreatic surgery and bariatric surgery.

hospitalization@gmail.com

Notes: