JOINT EVENT

7th International Conference and Exhibition on Surgery
&
3rd International Conference on Anesthesia

June 21-23, 2018   Dublin, Ireland

Development of proficiency with robotic pancreaticoduodenectomy

Sharona Ross, Michael Musumeci, T J Bourdeau, Iswanto Sucandy and **Alexander Rosemurgy**
University of Central Florida, USA

Introduction: As minimally invasive surgery continues to progress; robotic surgery is finding its application for complex abdominal operations. This study was undertaken to document our continued development of proficiency with robotic pancreaticoduodenectomy (PD).

Methodology: With IRB (Institutional Review Board) approval, the first 128 patients undergoing attempted robotic PD (pancreaticoduodenectomy) at a single institution have been prospectively followed. Patient demographics and outcomes were analyzed. Clavien scores of I-IIIb are defined as minimal severity. Operative duration was defined as time from incision to dressing application. Data are presented as median (mean±SD).

Results: 61% of patients were men, of age 69 (68±10.9) years, BMI 26 (27±7.5) kg/m^2, and ASA class 3 (3±0.6). 77% of patients were diagnosed with adenocarcinoma. 21% of attempted robotic PD were converted to 'open' operations; operations converted to 'open' decreased with time ($p<0.05$, Figure). Operative duration (424 (425±113.6) minutes) did not change over time. 62% of resections were R0 and 38% of resections were initially R1 that were converted to R0. EBL (estimated blood loss) decreased with time, was minimal in patients undergoing robotic PD, and was greater in patients converted to 'open' PD ($p<0.05$). LOS (Length of stay) was longer for operations converted to 'open' PD (8 (12±13.1) days] than those completed robotically (5 (8±8.7) days, $p<0.05$]. Postoperative complications and in-hospital mortality were lower in operations completed robotically ($p<0.05$). Overall, 49% of patients experienced postoperative complications (e.g., infection, urinary retention, respiratory insufficiency) the majority of which, 78%, were of minimal severity. Of the procedures completed robotically, 45% of patients experienced postoperative complications with 85% of minimal severity.

Conclusions: Experience with robotic PD led to fewer conversions to 'open' and less EBL, but not shorter operative times. Operations converted to 'open' had a greater EBL, more postoperative complications, and longer LOS. By 128 attempted robotic pancreaticoduodenectomy, there was notable progress in the standardization of operative conduct; however, there remains room for further improvement. Our experience indicates robotic pancreaticoduodenectomy is practical and efficacious, but with longer operative duration and a notable learning curve.

Biography

Sharona Ross, MD FACS served in the Israel Defense Forces. She moved to the US to attain her undergraduate degree and received her Medical Degree from the George Washington University School of Medicine. After General Surgery residency training at the University of South Florida, she completed two Fellowships, one in Advanced GI Minimally Invasive Foregut & HPB Surgery and the other in Gastroenterology and Endoscopy. She is a Professor of Surgery at the College of Medicine, University of Central Florida, USA. She is also the Director of the Advanced GI Foregut and HPB Surgery Fellowship at Florida Hospital Tampa, USA. As the Director of MIS and Surgical Endoscopy at Florida Hospital Tampa, she continues to develop new and innovative techniques to promote the safety and application of minimally invasive laparo-endoscopic single site (LESS) surgery and robotic surgery. She is one of the few surgeons to offer patients robotic complex abdominal operations for malignancies of the esophagus, stomach, pancreas, biliary system, gallbladder, liver and small bowel. She has numerous peer reviewed publications and book chapters to her credit. She is also the Founder and Chair of the International Women in Surgery Career Symposium.

Sharona.Ross@yahoo.com

Notes:

Surgery: Current Research
ISSN: 2161-1076

Surgery 2018 & Anesthesia 2018
June 21-23, 2018

Volume 8

Page 67