LONG-TERM RESULTS OF SINGLE-SITE ROBOTIC CHOLECYSTECTOMY

Georges Kaoukabani, MD, MSc[1]; Fahri Gokcal, MD[1]; Alexander Friedman, MD[2]; Jenna Bahadir, MD[1]; Kelly Vallar, MD, FACS[1]; Omar Yusef Kudsi, MD, MBA, FACS[1,3]

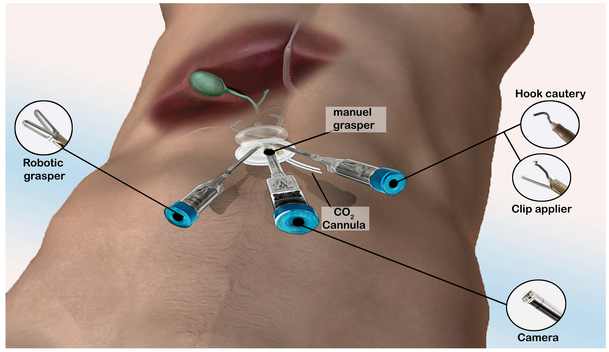
[1]Good Samaritan Medical Center; [2]Tufts Medical Center; [3]Tufts School of Medicine

Objective

- To evaluate long-term complications and incisional hernia rates after single-site robotic cholecystectomy.

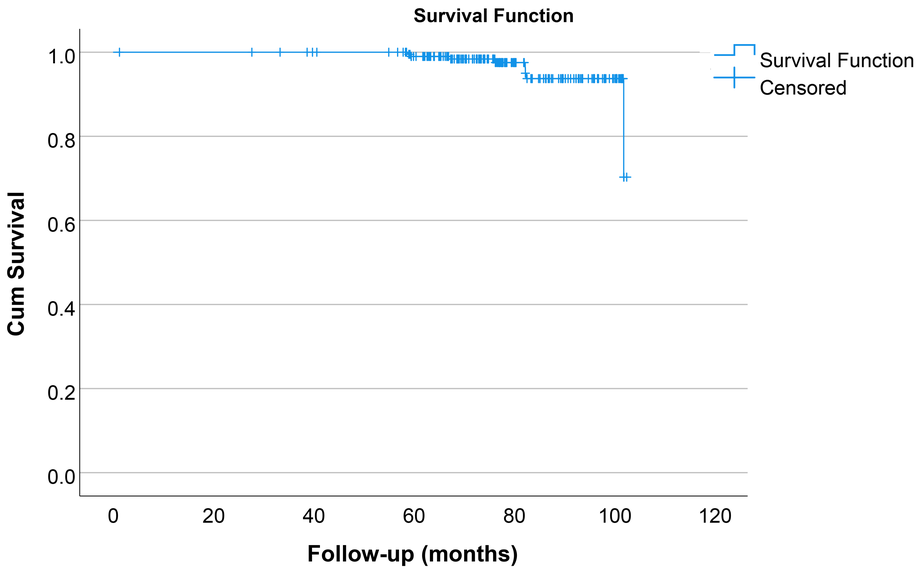
Methods

- Patients who underwent single-site robotic cholecystectomy between February 2014 and December 2017 were reviewed.
- Analysis of pre-, intra-, and postoperative variables were analyzed. Complications were assessed using the Clavien-Dindo Classification (CD) and Comprehensive Complication Index (CCI®) scoring system.
- Follow up consisted of a combination of telehealth visits, physical examination, and imaging studies in order to assess for occurrence of incisional hernias.
- Kaplan-Meier's time-to-event analysis was performed to calculate the estimated freedom from an incisional hernia.



Results

- 211 patients who underwent SSRC were included.
- Mean±Standard Deviation (SD) for age and body mass index were 45±16.6 years and 28±5 kg/m^2, respectively.
- 141 patients had an American Society of Anesthesiologists score of 2.
- Median (interquartile range) console time and skin-to-skin time were 18 (14-27) and 38 (29-51) minutes, respectively.
- No recorded intraoperative complications or conversions to other approaches in the cohort.
- Chronic cholecystitis and cholelithiasis most commonly detected (185 and 164 cases, respectively), with a lower number of acute cholecystitis (32).
- Average follow-up of 77 months. Nineteen (9%) postoperative events recorded, of which eleven surgical site complications.
- Clavien-Dindo grades -1 (3.3%) and CD-3B (3.8%) complications mostly recorded. CCI® scores ranged from 0 to 39.7.
- Two postoperative endoscopic retrograde cholangiopancreatography (ERCP) performed due to suspicion for common bile duct stone; both with negative findings.
- Eight (3.8%) incisional hernias recorded.
- Estimated hernia-free time of 100 months (95% confidence interval = 99-101) for the cohort.



Conclusion

- This is the first study to describe long-term follow-up in single-site robotic cholecystectomy.
- In our experience, we demonstrated a low incisional hernia rate and overall favorable outcomes.

Contact information *: omar.kudsi@tufts.edu*