

INDEX ADMISSION CHOLECYSTECTOMY IN UNCOMPLICATED ACUTE BILIARY PANCREATITIS

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Introduction

- Despite an increase in acute biliary pancreatitis hospitalizations (ABPH) index admission cholecystectomy (I-CCY) has remained sub-optimally performed nationwide as low as 50-55%.

Methods

- Nationwide Inpatient Sample (NIS) 2016-2019yy was analyzed for adult ABPH and associated I- CCY. ICD-10 diagnosis, procedure, and complication codes were used and separate sociodemographic, and outcomes analyses performed for open (O-CCY) and laparoscopic CCY (L-CCY). I-CCY timing was further divided into early < 72hrs and delayed >72hrs groups. The primary outcome was defined as the percentage of I-CCY performed; Mortality, length of stay (LOS), mean charges and complications were analyzed.

Results

- Out of total 274,580 ABPH, 162,590 patients (59.2%) had I-CCY, 72.5% (117,945) performed in <72hrs and 25% (40,040) >72hrs. 156,125 patients (96%) had L-CCY, and 6,465 patients (4%) had O-CCY; 64.4% and 75.1% performed in < 72hrs, while 35.5% and 25% >72hrs for O-CCY and L- CCY respectively. The highest number of L-CCY was performed on day 2 (28.1%) and >5 days (22.7%) for O-CCY. Mortality was 0.1% and 0.5% for the early and delayed group. Overall and all types of complications were higher in the delayed CCY group 10.4% vs. 21.8%, with renal complications being significantly higher at 7.5% vs. 17%. Both O-CCY and L-CCY had higher complications when performed >72hrs: 28% vs. 41% for open CCY and 10% vs. 21% for L-CCY (Figure 1).

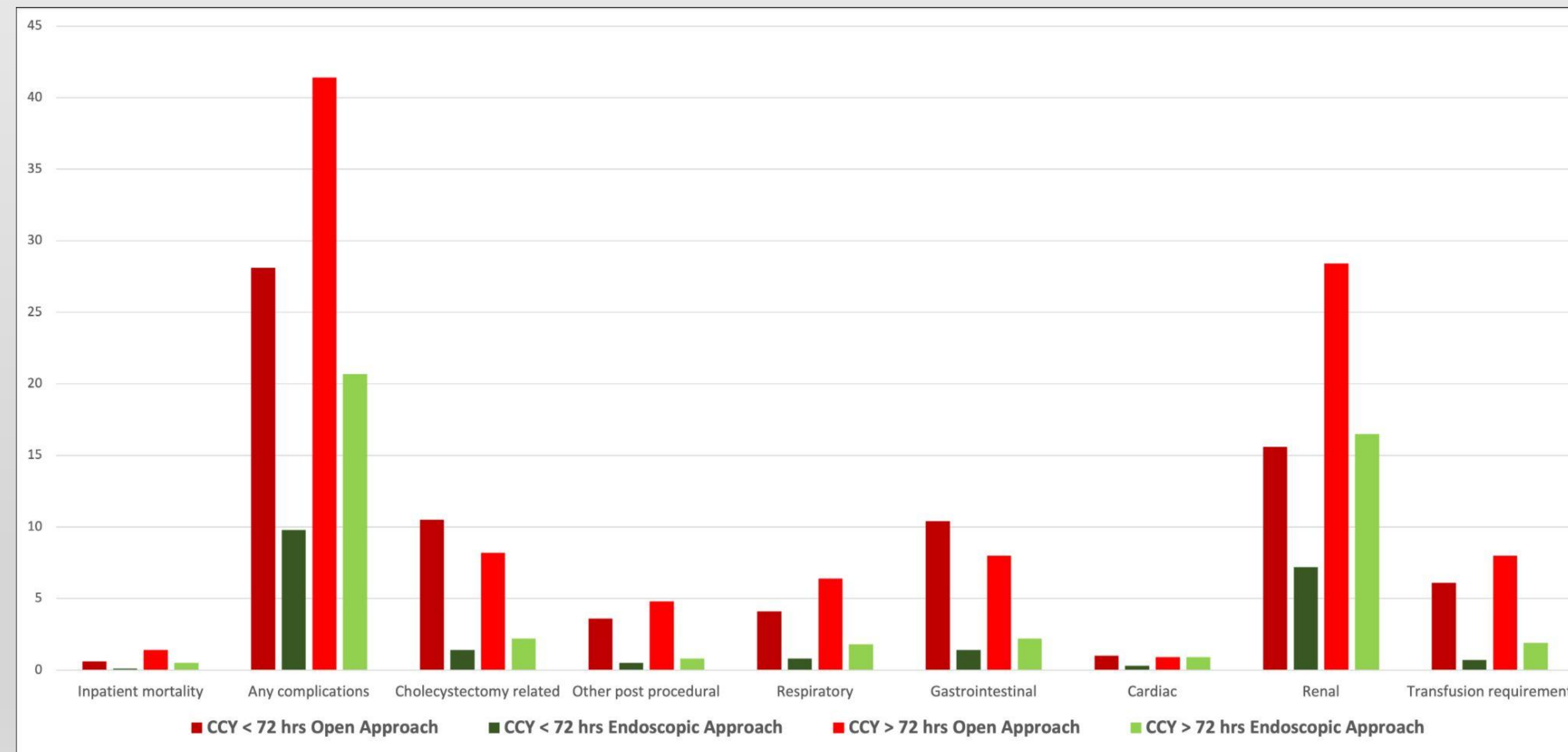


Figure 1. Mortality and Complications by Timing of Index Admission Cholecystectomy, NIS 2016-2019

- Sociodemographic analysis revealed that males were more likely to receive O-CCY and females were significantly higher proportionately to receive L-CCY. (O-CCY: M:F 54% vs. 46% L- CCY: 37% vs. 63%). Asian, Native Americans, and Black patients were least likely to receive L- CCY, and patients with public insurance and living in the lowest income areas were more likely to receive O-CCY.

Discussion

- Our analysis has demonstrated an increased total number of I-CCY in uncomplicated ABP across the U.S. but only up to 59% which remains suboptimal. Mortality and all-cause complications are higher in patients with ABP who undergo delayed I-CCY. The optimal timing for CCY during hospital admission for ABP is < 72hrs from admission. Racial, gender and economic disparities exist in the type of I-CCY performed. I-CCY decreases the recurrence of ABP, improves outcomes and survival, and its increased utilization should be strongly encouraged.