579 Emergency Surgical Admissions During The COVID-19 Pandemic; Comparative Study of Emergency Surgery Outcome Before and During The COVID-19

<u>H. Soliman</u>¹, A. Hussain², O. Manejwala¹, A. Ghosh¹, S. Shauib¹, R. Hafeez¹, S. El-Hasani¹ ¹King's College Hospital, London, United Kingdom, ²Doncaster and Bassetlaw

Teaching Hospitals, Doncaster, United Kingdom

Introduction: There are relatively few studies on emergency surgical practice in the COVID-19 pandemic. Our aim is to analyse the outcomes of emergency surgery before against those during COVID-19.

Method: Retrospectively we collected the emergency admissions to the general surgery department at a district general hospital during November 2019, which is a representative of our regular activity, and April 2020, the height of the COVID-19. The primary endpoint was the number and nature of surgical admissions and procedures. The secondary endpoints were morbidities and mortalities, laparoscopic and procedure approach (laparoscopic vs open), inflammatory markers (white cell count and C-reactive protein), hospital stay, gender and age. **Results:** During the two months a total of 332 patients were admitted; 177 during November 2019 and 146 patients during April 2020. The mean age was 51 years in the November group and 49 years in the April group. 146 operations were conducted in November, while 117 procedures were performed in April. Hospital stay average was 5.87 days and 5.43 days for November and April groups, respectively. In the April

group, seven patients tested positive for COVID-19. Mortality was slightly higher during April (2.05%) than November (1.6%). Postoperative complications, C-reactive protein level and prevalence of acute cholecystitis were much higher during April, while abscess and diverticulitis prevalence were significantly lower.

Conclusions: Morbidity, mortality and acute cholecystitis were significantly higher during the COVID-19 pandemic, while abscess and diverticulitis were significantly less prevalent likely due to and tendency by patients to avoid hospitals and hence late clinical presentation.