

**SP4.1.14****Single centre experience in managing acute appendicitis during COVID-19 pandemic**

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**Background:** Given the pressure of COVID pandemic, the UK Intercollegiate guidance encouraged a move towards non-operative or open appendicectomy management of acute appendicitis. The aim of the study was to assess the approaches used to manage acute appendicitis and their outcomes during pandemic peak and after it.

**Methods:** This was a single-centre retrospective study, 2-observer data collection. We collected and analysed data on acute appendicitis management approaches (surgical and non-surgical) and patient outcomes were compared during the peak of the pandemic (04-2020 to 06-2020) and post-peak (07-2020 to 09-2020) periods.

**Results:** 190 patients - (peak - 88, F:M=1.09, median age - 30.5) and post-peak 102 (F:M=1.12, median age -31)). There were no significant differences for APPY risk score, ASA grade, comorbidities between the groups. There was more diagnostic imaging performed during the peak of the pandemic (peak 71.6%, post-peak - 56.9%) ( $p=0.035$   $X^2=4.431$ ). Comparison between managing patients during peak and post-peak showed that approaches were the following: conservative (14.8% vs 14.7%,  $P=0.998$ ), laparoscopic appendicectomy (65.3% vs 96.6%  $P<0.001$ ), open appendicectomy (34.7% vs 3.4%  $P<0.001$ ). There was no significant difference in postoperative complications (Clavien-Dindo II-IIIb), readmission to hospital, or total LoS (median=3 days) between the groups ( $p>0.05$ ). Median LoS for patients treated conservatively was 1 day. Only 1 patient developed COVID postoperatively, the mortality was 0%.

**Conclusions:** Treatment strategies adapted and modified in COVID peak were effective and safe in managing acute appendicitis. Laparoscopic surgery remained a safe practice even in the peak of COVID pandemic.