P-BN06 Percutaneous cholecystostomy rates are increased following COVID-19 induced disruption to elective surgical pathways

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Background: The COVID-19 pandemic has led to major service disruptions, including the cessation of elective laparoscopic cholecystectomies (LC), causing delays in managing symptomatic gallstones. We hypothesised that this would lead to an increased need for percutaneous cholecystostomy (PC) for acute cholecystitis.
Methods: We performed a retrospective cohort study in a single NHS trust. We included all patients who underwent either LC or PC during the periods of March 1st – August 31st over the years 2019 and 2020. Patient data was obtained from prospectively maintained patient electronic notes. Data are presented as median and interquartile ranges for continuous data and the percentages for categorical data and compared with Mann-Whitney U-test and Fisher's exact tests respectively.
Results: We observed a substantial reduction in the number of LC performed in 2020 (n = 99) compared to 2019 (n = 198), whilst the number of PC performed in 2020 (n = 35) was more than double that in 2019 (n = 17) (Fig.1). This increase in numbers persisted even after our LC

service was restarted. Comparing the patients who underwent PC in both years, there were no significant differences in age (2019: 68 (45-76) vs 2020: 72 (57-81), $p = 0.41$), comorbidities (Charlson comorbidity index$\geq$4: 10 (59%) vs 16 (46%), $p = 0.56$), or in-hospital mortality (2019: 2 (12%) vs 2020: 3 (9%), $p = 0.99$). As a proportion of all biliary interventions for cholelithiasis, PC increased from 8% (17/214) in 2019 to 26% (35/134) in 2020 ($p < 0.001$).

Conclusions: These results show how the cessation of LC service was directly related to increased numbers of invasive 'damage control' procedures for acute cholecystitis, emphasising the importance of maintaining COVID-secure surgical pathways. The numbers of PC remained high even after the restart of LC service, consistent with a 'COVID shadow' resulting from interruptions to elective services that impacts patient care for a prolonged period.