

## TP10.1.13

**A model for safe elective liver resection during the SARS-CoV-2 (COVID-19) pandemic – lessons for enhanced recovery**

Maki Jitsumura Pulkit Sethi, Fenella KS Welsh,  
Kandiah Chandrakumaran, Myrddin Rees

*Department of Hepatobiliary Surgery, Basingstoke and North Hampshire  
Hospital, Basingstoke, Hampshire, United Kingdom*

**Background:** The COVID-19 outbreak in January 2020 rapidly became a pandemic, adversely impacting elective cancer services in the UK. This study describes the pandemic-driven changes to existing admission and enhanced recovery protocols, which allowed the Unit to maintain a liver resection service, and evaluates their impact on patient safety.

**Methods:** During the pandemic, all patients undergoing liver resection in this Unit isolated for 14 days prior to their admission, with COVID-19 testing 48 hours pre-admission. Patients were admitted on the day of surgery to the day surgery unit, a designated COVID-free environment. They underwent liver surgery, recovery and post-operative care, all within the day surgery unit. Using a prospectively collected database, short-term outcomes of consecutive patients undergoing elective hepatectomy during the COVID-19 pandemic (April - June 2020) were retrospectively compared to patients during the same period in 2019.

**Results:** During the pandemic, 24 patients underwent hepatectomy compared to 34 patients in 2019. There was no statistical difference in demographics, indications for surgery, intra-operative parameters or complications between these periods. The median post-operative length of stay (LOS) was significantly shorter during the pandemic [3 (IQR: 3-4) days vs. 4 (IQR: 4-7) days,  $p=0.015$ ], as was the overall LOS [4 (IQR: 4-6) days vs. 6 (IQR: 5-9) days,  $p=0.006$ ]. No patient contracted COVID-19 per-operatively.

**Conclusions:** Patient pathway changes during a pandemic enabled safe liver surgery to be undertaken with improved outcomes – a model that is transferrable to other Units.