664 The ICON Trauma Study: The Impact of the COVID-19 Lockdown on Major Trauma Workload in the UK

A. Adiamah, A.i Thompson, C. Lewis-Lloyd, E. Dickson, L. Blackburn, N. Moody, S. Gida, A. La Valle, J.J. Reilly, J. Saunders, A. Brooks, ICON Trauma Study Group
East Midlands Major Trauma Centre, Nottingham University Hospitals NHS, Nottingham, United Kingdom

Introduction: Anecdotal evidence suggest a direct impact of the SARS-COV-2-pandemic on presentation and severity of major trauma.
Method: This observational study from a UK Major Trauma Centre matched a cohort of patients admitted during a 10-week period of the SARS-CoV-2-pandemic (09/03/2020 to 18/05/2020) to a historical cohort admitted during a similar time period in 2019 (11/03/2019 to 20/05/2019). Demographic differences, injury method and severity were compared using Fisher's and Chi-squared tests. Multivariable logistic regression examined the associated factors predicting 30-day mortality.
Results: Of 642 patients, 405 and 237 were in the 2019 and 2020 cohorts respectively. 1.69%(4/237) of the 2020 cohort tested SARS-CoV-2 positive. There was a 41.5% decrease in trauma admissions in 2020. The 2020 cohort was older (median 46 vs.40 years), more comorbid and frailer ($p < 0.0015$). There was a significant difference in injury method with a decrease in vehicle related trauma, but an increase in falls. There was a 2-fold increased risk of mortality in the 2020 cohort that in adjusted models, was explained by higher injury severity and frailty. Positive SARS-CoV-2 status was not associated with increased mortality on multivariable analysis.
Conclusions: Patients admitted during the SARS-CoV-2-pandemic were older, frailer, more co-morbid and had an increased risk of mortality.