The impact of COVID-19 on emergency surgical presentations in a University Teaching Hospital

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Background: The coronavirus-19 (COVID-19) pandemic has led to 50–70% reduction in acute non-COVID presentations to emergency departments globally. Aim: To determine the impact of COVID-19 on incidence, severity and outcomes of acute surgical admissions in an Irish model hospital.

Methods: Descriptive data concerning patients presenting with acute appendicitis, diverticulitis and cholecystitis were analysed and compared from March–May 2020 (2020) to March–May 2019 (2019).

Results: Acute surgical admissions decreased in March from 191 (2020) to 55 (2019) (55%), before increasing by 28% in April (2020: 153, 2019: 119). For the acute cholecystitis group, a reduction of 33% was observed (2019: 33, 2020: 22), with increased severity at presentation being reported (P=0.079) and higher 30-day readmission rates (P=0.056). Acute appendicitis presentations decreased by 44% (2019: 78, 2020: 43, P=0.019), with an increase in severity (P<0.001), to be managed conservatively (P<0.001), and post-operative complications (P=0.029) in 2020 compared to the same period in 2019.

Conclusions: The COVID-19 has potentiated a significant reduction in overall number of acute surgical presentations in our hospital. Patients presenting with acute appendicitis during the pandemic had more severe disease, were more likely to have complications and were significantly more likely to be managed conservatively when compared to historical data.

Keywords: Emergency surgery; coronavirus-19 (COVID-19); surgery; patient outcomes

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Footnote

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