Laparotomy rates and factors influencing treatment modality for diverticulitis during the COVID-19 lockdown

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Background: Infection control measures during the COVID-19 crisis modified diverticulitis treatment. Here we present the treatment applied in three large UK centres compared to the same timeframe in 2019.

Methods: This was a multicentre, comparative study, whereby diverticulitis cases from March 23rdto May 11th2019 acted as historical controls for cases during lockdown. Severity at presentation (SD), comorbidities, treatment modality, Length of Stay (LOS), complications and COVID-19 status (CS) were recorded. Chi-squared, ANOVA, Mann-Whitney test and linear regression were used for analyses.

Results: 59 patients presented with diverticulitis in 2020 compared to 130 in 2019 (M:F 27/32, 56/74 and 64vs.62 y.o.). Laparotomy was performed in 6/59 and 12/130 respectively. Comparing 2019 to 2020, there was no statistical difference for severity (p = 0.643), treatment modality (0.946), comorbidities (0.313), LOS (0.602). Linear regression demonstrated statistically significant association between treatment employed (p < 0.001) and SD, while there was no association with age, comorbidities or CS. LOS was associated with severity only (p < 0.001), whilst CS, treatment, age and comorbidities yielded no statistical difference.

Conclusion: Diverticulitis cases during 2020 lockdown reduced noticeably (59vs.130). There was no difference in severity, treatment, comorbidities or LOS between 2019 and 2020. Laparotomy was performed in 6/59 and 12/ 130 respectively. Decision about treatment and LOS in 2020 was associated with severity of disease only. There was no association with COVID status. These findings should be interpreted with caution due to small COVID positive numbers and not including ambulatory units, however, they are consistent with findings from our sister Spanish group.