

TP10.1.3 SARS-Cov-2 and Colitis: A Case Series

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Background: Up to a third of patients with COVID-19 infection present with gastrointestinal (GI) symptoms. The Sars-Cov-2 virus enters enterocytes through a novel mechanism via ACE-2 receptors, which are expressed throughout the GI tract, especially in the mid-gut. Small bowel and colonic inflammation and alteration of the gut microbiome (“altered inflammasome”) have been observed.

Aims: We report a cluster of cases during the first and second wave UK pandemics involving young patients with unexplained segmental CT-proven colitis.

Methods: All patients diagnosed with CT proven colitis with no history of IBD, ischaemic colitis or significant medical comorbidities were included.

Results: Fifteen patients (median age 33 years; 8 females) were admitted under Emergency General Surgery between Mar 2020 & Jan 2021. All patients were previously well with no history of IBD, ischaemic colitis or significant medical comorbidities. Thirteen patients underwent CT imaging, showing evidence of colitis in 12, with changes affecting the right colon predominating. *Campylobacter jejuni* was identified in 4 of 7 stool cultures but only 1 patient had a positive PCR nasal swab and another had COVID antibodies detected in serum. Endoscopic and histological appearances of those undergoing colonoscopy were non-specific.

Conclusion: These cases may represent Covid-19 involvement of the gut. Nasal swabs are not validated for use in the GI tract and detection of SARS-Cov-2 virus requires faecal or mucosal sampling. Disruption of the microbiome permits emergence of pathogenic species such as *Campylobacter*. More work is required in this important area to further define and elucidate COVID-19 GI involvement.