

## COVID Investigator Prize

### 26 COVID-19 Diagnosis in Patients with Acute Abdominal Pain Without Respiratory Symptoms: A UK Emergency General Surgical Unit Experience

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**Introduction:** Evidence has emerged reporting atypical symptoms of the coronavirus (COVID-19). There is a sparsity of existing studies examining COVID-19 related abdominal pain and the role of investigative imaging for the virus in these patients. Study aims were to determine COVID-19 incidence in those with acute abdominal pain in the absence of respiratory symptoms and to assess the performance of Computer Tomography (CT) thoracic imaging.

**Method:** Retrospective analysis of all patients admitted to our emergency general surgical unit between 1<sup>st</sup> March 2020 and 31<sup>st</sup> May 2020 was performed. All patients underwent nasal and oro-pharyngeal COVID-19 RT-PCR swabs as well as CT on admission.

**Results:** From 112 patients admitted with acute abdominal pain in the absence of respiratory symptoms, 16 (14.3%) tested positive for COVID-

19 on RT-PCR swab testing. 50% (8/16) of these patients had no intra-abdominal pathology on CT. The sensitivity and specificity of CT thoracic imaging for COVID-19 was 43.8% and 91.7%.

**Conclusions:** One in seven patients with abdominal pain without any respiratory symptoms tested positive. Half these patients represented COVID-19 manifesting primarily as acute abdominal pain. Combined swab testing and CT imaging should be performed in all abdominal pain presentations due to the varying diagnostic performance of thoracic CT in diagnosing COVID-19.