

that with increased familiarity of staff with the proforma, all patients will be risk-assessed upon discharge and will receive VTE prophylaxis if indicated. Further work should assess ongoing compliance with the proforma, and explore the impact of extended VTE prophylaxis on morbidity and mortality amongst vascular surgery patients.

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EVALUATION OF COMPUTED TOMOGRAPHY (CT) CHEST AS A SCREENING TOOL FOR COVID-19 IN SURGICAL PATIENTS PRESENTING TO THE ROYAL VICTORIA HOSPITAL EMERGENCY DEPARTMENT- A NORTHERN IRISH STUDY.

Editor,

Coronavirus disease (COVID-19) is an on-going pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)¹. Undiagnosed COVID-19 infection can complicate peri-operative outcomes and increase transmission to staff via aerosol-generating anaesthetic procedures. In the absence of rapid reverse transcriptase-polymerase chain reaction (RT-PCR) testing, it had been recognised that CT chest could play a role in surgical emergencies where awaiting laboratory results would delay patients' management. On 25th March 2020, the British Society of Thoracic Imaging (BSTI) and the British Society of Gastrointestinal and Abdominal Radiology (BSGAR) recommended low-dose CT chest in addition to CT abdomen

and pelvis in patients presenting as a surgical emergency².

We aimed to evaluate the use of additional CT chest in acute surgical patients presenting to the Emergency Department (ED) of the Royal Victoria Hospital, Belfast.

CT chest, abdomen and pelvis scans requested from ED where the indication was to identify acute surgical pathology were included. Chest x-ray (CXR) and CT images were obtained from Picture Archiving and Communication System (PACS) which were graded according to the BSTI guidelines; normal, indeterminate and classic/probable COVID-19³. Patient outcomes were verified from Northern Ireland Electronic Care Record (NIECR).

A total of 100 patients underwent CT chest as part of the national acute abdominal imaging pathway for COVID-19 from 1st March to 2nd May 2020.

Using BSTI CT reporting proforma, no CT chest scans were reported as classic/probable COVID-19. Three were reported as indeterminate, 78 scans were normal and 19 demonstrated other pathology. Interestingly, the only positive RT-PCR case had a normal CT chest.

Table 1.
CXR, CT and RT-PCR results in symptomatic cohort

Symptomatic patients	Report	%	n
CXR	Normal	35	6
	Abnormal	18	3
	Not performed	47	8
CT	Normal	82	14
	Indeterminate	6	1
	Classic/probable	0	0
	Other/non COVID	12	2
RT-PCR	Negative	76	13
	Positive	6	1
	Not performed	18	3

Table 2.
CXR, CT and RT-PCR results in asymptomatic cohort.

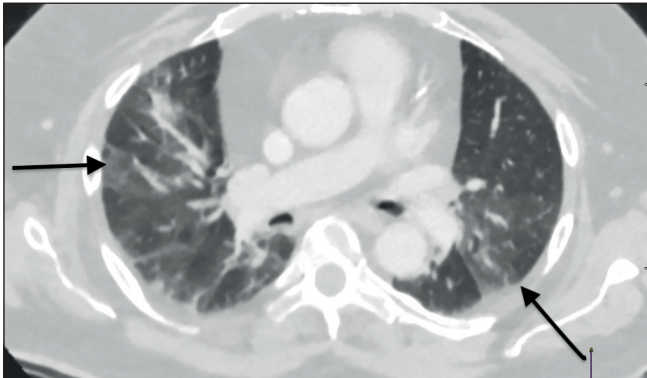
Asymptomatic	Report	%	n
CXR	Normal	41	29
	Abnormal	17	12
	Not performed	42	30
CT	Normal	75	53
	Indeterminate	2	2
	Classic/probable	0	0
	Other/non COVID	23	16
	Not performed	0	0
RT-PCR	Positive	61	43
	Negative	39	28
	Not performed	0	0

Of the three patients who had indeterminate findings on CT, results did not alter surgical management in any case. The first case was asymptomatic and RT-PCR negative. CT reported patchy areas of ground glass opacification (GGO). The patient was admitted to intensive care for the management of pancreatitis.



Figure 1.

Example of indeterminate findings on CT chest with ground glass opacification within basal aspects of both lower lobes (arrows).



The second patient was asymptomatic and RT-PCR negative. CT reported dependant lower GGO, equivocal for COVID-19. The patient proceeded to emergency laparotomy for intra-abdominal perforation. CT findings had no bearing on surgical management, however influenced bed management decisions.

The third case was a symptomatic patient with cough and fever, RT-PCR negative. CT reported GGO in the right upper lobe and multifocal consolidation in both lower lobes. The patient was managed conservatively for pancreatitis.

Additional CT chest screening had no impact on acute surgical management in our study. Due to increased radiation exposure, demand on radiology services and low diagnostic yield, BSTI/BSGAR advised that additional CT chest is no longer recommended⁴. Fortunately, we now have improved access to point-of-care testing e.g. LumiraDx SARS-CoV-2 Ag test which provides results within 20 minutes aiding timely surgical management⁵.

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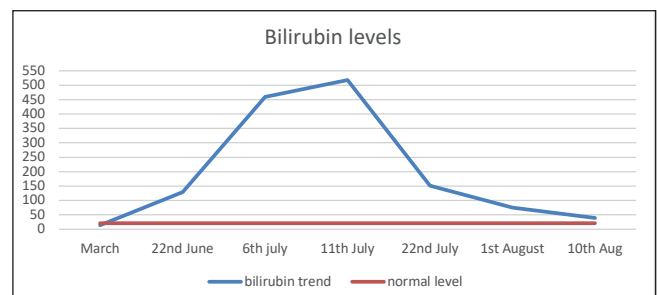
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“WHY AM I SO YELLOW??” – LATE ONSET SEVERE HYPERBILIRUBINEMIA DUE TO CARBIMAZOLE THERAPY

Editor,

We present the case of a 38 year old male with late onset of severe hyperbilirubinemia 1 year after commencing carbimazole therapy. He had a history of hyperthyroidism, diagnosed in May 2019. His thyroid function tests (TFTs) were difficult to stabilize on carbimazole titration. Therefore, he was switched to block and replace treatment with carbimazole 40 mg and levothyroxine 100 micrograms daily after 3 months. TSH receptor antibodies were strongly positive in keeping with Graves' disease.

He presented to hospital in June 2020 with a 6 week history of jaundice, mild abdominal pain and feeling generally unwell. He had no prior history of liver disease and had a normal bilirubin in March 2020, with mildly cholestatic pattern of liver function tests. On admission, his bilirubin was 129 with a mixed cholestatic-hepatitic pattern of liver enzymes. Prothrombin time (PT) was raised at 15. Ultrasound imaging revealed normal liver structure with no biliary dilatation. Carbimazole was stopped and a full liver screen sent. He initially discharged himself against advice, however, he was re-admitted in July when his jaundice worsened and bilirubin had risen to 459 on repeat bloods with PT of 18.6. He did not have any other evidence of decompensated liver disease. MRCP showed no abnormalities within the biliary tree. Bilirubin continued to rise and liver biopsy was undertaken which revealed features of a mixed cholestatic-hepatitic liver injury, with the cholestatic injury significantly more prominent. It was considered most likely to represent a drug related liver injury. The patient had taken no other prescribed or over the counter medication and no illicit substances. Over time, liver function slowly improved and the jaundice resolved completely. Propylthiouracil was considered inappropriate for treatment given risk of hepatotoxicity and iodine was not practicable due to social circumstances. The patient went on to have a total thyroidectomy.

**Fig 2:** trend of bilirubin levels