which may challenge interpretation. Meanwhile, the patient who was symptomatic and RT-PCR positive had indeterminate features on CT: unilateral, relatively central consolidation/ground glass. Overall, therefore, these findings support the assertion made by National Institute for Health and Care Excellence (NICE) guidelines[5] that CT should not be performed in patients preoperatively with no symptoms.

Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Re: clinical characteristics and radiological features of children infected with the 2019 novel coronavirus

Sir—We read with interest the article by Lu *et al.* in the Journal. The authors stated that chest computed tomography (CT) is a key component in the diagnostic work-up for patients with suspected 2019 novel coronavirus (COVID-19) infection[1]; however, studies have shown that the patterns of COVID-19 infection on CT are non-specific and variable, ranging from normal to abnormal with no correlation to timing of positive viral detection.[2] It is based on this evidence that the Centers for Disease Control and Prevention (CDC) state that the chest radiograph or CT alone is not recommended for the diagnosis of COVID-19.[2] The American College of Radiology (ACR) also does not recommend CT for screening or as a first-line test for diagnosis of COVID-19.[3] Recently, the European Society of Paediatric Radiology (ESPR) taskforce has written similar guidance echoing that imaging should not be used routinely for the diagnosis of COVID-19 in children, but reserved for cases where results are anticipated to alter the management.[4]

We note that CT was recommended as the major evidence of clinical diagnosis in HuBei province by the National Health and Health Commission of China (5th edition).[5] It is unclear if this was targeted at the adult or paediatric population, but one would assume this was the former in view of the severity of disease in the adult versus the paediatric population. Although there may be different guidance in Guangzhou province, if the HuBei province recommendation was used, it may be the case that the authors had to perform CT in these children; however, the blanket application of this guidance to the paediatric population disregards the "as low as reasonably achievable" (ALARA)[6] principle and the Image Gently Alliance,[7] which advocates that when studies are indicated, they should be performed with the lowest radiation exposure that will allow diagnosis.

Although the study's patients all tested positive using the oropharyngeal test, they had relatively mild symptoms (one had a high fever of 39.1°C) and none necessitated intensive care admission. The patients' mild clinical symptomatology did not, in our opinion, warrant CT. In particular, it is questionable if a chest radiograph was even justifiable in the one asymptomatic patient who remained asymptomatic with no clear/overt abnormality seen on both the chest radiograph and CT performed. Applying the British Society of Thoracic Imaging (BSTI)[8] radiology decision tool for suspected COVID-19, at least two patients would not have had a chest radiograph, much less a chest CT. The follow-up CT exaiminations performed in two patients also goes against the ALARA principle and guidance from the Image Gently Alliance: one patient had rhinorrhea while the other had a low-grade fever (36.8°C) and cough. As these patients already had a radiographic abnormality, would it not be reasonable for follow-up with a chest radiograph instead of CT?

Lastly, we acknowledge that this was a retrospective study and understand the potential importance of identifying the radiological manifestations of COVID-19 in the midst of a world-wide pandemic; however, moving forward, we argue that the risk of radiation exposure to the

patient outweighs the benefit of the additional information that CT provides in the treatment management pathway of COVID-19, which is predominantly supportive. In the paediatric population specifically, CT should not be considered in the diagnostic work-up of COVID-19.

Conflict of interests

The authors declare no conflict of interest.

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Re: Controversy in coronaViral Imaging and Diagnostics (COVID)

Sir—We read with interest the brilliant and witty correspondence from Hamilton and colleagues[1] regarding the use of computed tomography (CT) in screening patients for COVID-19. In their letter, the authors raised reasonable doubts about the value of this method, referring to its low specificity. As CT does not test for the virus, the pulmonary abnormalities, usually treated as manifestations of COVID-19, could be associated with other diagnoses, such as heart failure or air trappings. Although the arguments of Hamilton and colleagues are convincing, we would like to draw attention to the practical value of CT for triage of patients with suspected COVID-19, especially in densely populated areas.

At the time of writing, Russia was ranked third regarding the number of confirmed cases of COVID-19 infection globally,[2] and the most of the burden fell on its capital. Moscow is a large city with high population density: in some districts, it reaches 30,500 people/km^2,[3] which is higher than Manhattan, New York, with 27,544 people/km^2.[4] Given the reluctance of inhabitants to wear masks during the first weeks of the pandemic, grave consequences awaited Moscow. As of 8 June 2020, there were 197,018 patients with diagnosed COVID-19 in the city[5] (for comparison, the total number of cases in Italy was 235,278[2]).

In this situation, it is essential not only to diagnose the disease correctly, but also to make the right decision about the need for patient hospitalisation. The "reference standard" for COVID-19 clinical diagnosis is reverse transcription polymerase chain reaction (RT-PCR), which requires staff training, special conditions to avoid contamination, and takes hours, or even days, to perform, in addition to the requirement for specialised equipment and reagents. Notably, this approach has less than optimal sensitivity, as mentioned by Hamilton and colleagues.[1] When decision-making is urgent (i.e., during a pandemic), the use of alternative methods is fully justified.

CT has one significant advantage over RT-PCR: it is quick. The results are ready within 15 minutes, and the most crucial concern is to interpret them correctly. Radiologists' reports are prone to subjective identification and classification of lesions.[6] In Moscow, we addressed this problem using a simplified grading system "CT0–4" based on the degree of lung tissue damage[7] initially proposed by Xie and colleagues.[8] We provided radiologists with standardised templates so that they could categorise patients by the extent of pulmonary involvement. As a rationale for mandatory hospitalisation, we used a threshold of pulmonary parenchymal involvement of >50% (CT3 category according to our grading system) combined with the symptoms of deteriorating acute respiratory infection. Patients with mild conditions were assigned to home care under telemedicine guidance. Moscow Radiology Reference Center (MRRC) was responsible for reducing the likelihood of incorrect interpretation of CT images. Here experienced radiologists provided a second opinion, remote consultations, and methodological support through the Unified Radiology Information System (URIS). URIS connected the scanners (449 X-ray, 94 mammography, 198 fluoroscopy, 146 CT, 78 magnetic resonance imaging [MRI], 16 integrated positron-emission tomography [PET]/CT), enabling remote communications and the delivery of CT images and radiology reports to the MRRC and Moscow city hospitals.