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In those with a moderate Wells' score, 0/19 (0%) with a d-dimer of less than 500ng/ml were positive for PE and 51/210 (24.3%) with a d-dimer greater than 500ng/ml were positive.

In those with a low Wells' score, 3/107 (2.8%) with a d-dimer of less than 1000ng/ml positive. All three were small volume segmental or sub-segmental PEs. 22/93 (23.7%) with a d-dimer of greater than 1000ng/ml were positive.

In those with a low Wells' score, 0/66 (0%) patients with a d-dimer of less than 750ng/ml were positive and 25/134 (18.7%) patients with a d-dimer of greater than 750ng/ml were positive.

Conclusion: A vetting strategy requiring a d-dimer of greater than 500ng/ml in those with a moderate Wells' score, or a d-dimer of greater than 750ng/ml with a low Wells' score could reduce the number of CTPAs performed by 15.7%, safely reducing radiation exposure and allowing better resource allocation, without missing PEs.

Only imaging those low risk patients with a d-dimer greater than 1000ng/ml could miss a small number of small volume PEs but reduce the number of studies performed by 23.3%.

The development of the COVID-19 radiological learning system (CORALS) to improve accurate management in the COVID-19 pandemic

Authors: Yan Chen, Eleni Michalopoulou, David Baldwin, Sam Hare, Dorina Roy, Graham Robinson, Joseph Jacob, Anand Devaraj, Arjun Nair, Emma O'Dowd

Category: Thoracic

Purpose: A web-based educational and research platform was developed to improve radiologists' diagnostic accuracy and knowledge of the COVID-19.

Methods and materials: Modifying the well-established PERFORMS EQA platform for breast screening readers, a high-quality COVID-19 radiological research system was developed to provide free and readily accessible training to all radiologists. A collection of 100 de-identified COVID-19 cases with anonymous patient clinical information (age, temperature, C-reactive protein [CRP], and so on) were acquired from hospitals in the UK and China. Five expert radiologists reviewed these cases, judging their difficulty and suitability for the scheme and giving their opinions about radiological appearances and disease distribution. The CORALS platform allows radiologists to examine sets of 40 cases and report their decisions for each case on the reporting software and receive expert feedback.

Results: To date the platform has been tested by six expert radiologists and is being piloted in specific sites across the UK and the data resulting from these pilots will be analysed and presented at the RCR conference. We understand at this time no meaningful data can be usefully presented in this abstract of work in progress.

Conclusion: It is argued that employing such an approach can help radiologists make accurate decisions and recommendations on COVID-19 radiological appearances.