

The Reply



The comments by Dr Jolobe in response to our case¹ are a welcome reminder of the importance of employing the diagnostic strategy that is best for the patient, not only regarding accuracy and timely assessment but also in taking into account potential harmful effects (e.g., in our patient, radiation exposure due to the computed tomography pulmonary angiogram [CTPA]).

The latest guidelines of the European Society of Cardiology from 2019 support the approach to initially perform a transthoracic echocardiogram in patients suspected of having a pulmonary embolism, who are hemodynamically critically unstable.²

However, our patient was, even though in a potentially life-threatening condition, never persistently hemodynamically critically unstable and therefore this recommendation did not apply.

Furthermore, the authors believe, that to make the decision to thrombolize a patient, most clinicians would demand a definite diagnosis of pulmonary embolism, if time permits, because the described echocardiographic “stigmata of pulmonary embolism” can occur in other conditions as well.³

Another issue is the availability of point-of-care transthoracic echocardiography in National Health Service (NHS) hospitals' Emergency Departments and Acute Medical Units. Knight et al⁴ found that there are still less than 60% of Acute Medical Units in the NHS equipped and staffed to provide adequate ultrasound and echocardiography diagnostics.

As previously pointed out by the authors, this could potentially be overcome by closer interdepartmental cooperation but depends on local agreements.⁵ Unless this becomes a wider spread cultural change within the NHS, the reality is that it can be often easier and timelier to obtain a computed tomography pulmonary angiogram, than an

echocardiogram by a skilled and experienced operator. This is especially true when the patient recovers hemodynamically spontaneously, as was the situation with our patient.

The way forward would be for NHS hospitals to be given more resources to enable adequate training and equipment procurement to be able to provide the best diagnostic strategy for their patients in Emergency Departments and Acute Medical Units, should the need arise.

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References

1. Krishan A, Droste JC, Molloy K, et al. Popliteal vein aneurysm masquerading as a Baker's cyst leading to pulmonary embolism. *Am J Med* 2021;134:1497–500.
2. Konstantinides SV, Meyer G, Becattini C, et al. The Task Force for the diagnosis and management of acute pulmonary embolism of the European Society of Cardiology (ESC). 2019 ESC Guidelines for the diagnosis and management of acute pulmonary embolism developed in collaboration with the European Respiratory Society (ERS): The Task Force for the diagnosis and management of acute pulmonary embolism of the European Society of Cardiology (ESC). *Eur Respir J* 2019;54(3):1901647.
3. Mazur ES, Mazur VV, Rabinovich RM, et al. Right ventricular longitudinal strain in acute pulmonary embolism and right ventricular myocardial infarction in patients with McConnell's sign. *Kardiologija* 2020;60(7):20–7.
4. Knight T, Clare S, Smallwood N, et al. Gaps in point of care ultrasound provision and the cost of ultrasound equipment provision: results of a nationwide audit of acute medical units. *Acute Med* 2020;19(2):64–8.
5. Droste J. Letter to the Editor: 24 hour availability of echocardiography in Acute Medicine: time to get out of our 'silos'!. *Acute Med* 2012;11(3):185.

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