

REPLY: I am most appreciative of Dr. Bury's kind comments about my views on the use of ventilation–perfusion scintigraphy versus multidetector CT angiography for the study of pulmonary embolic disease. It appears as if we are in accord on most issues; most importantly, the overuse of CT angiography with its associated excessive radiation exposure, particularly to the female breast. The use of the plain chest radiograph for determining which modality to apply has worked quite well.

The one area where we appear to have some difference is how to handle the patient with chronic obstructive pulmonary disease who may have only minimal radiographic changes of “overinflation and a subtle increase in bronchovascular markings.” The frequent ventilation–perfusion scintigraphy result of multiple matched defects that troubles Dr. Bury has not been a problem for us. This combination of findings clearly falls into the low-probability category. To my knowledge, we have not had any problem or adverse feedback from our clinicians in calling these studies low probability. An ongoing retrospective review of over 1,200 ventilation–perfusion studies that were performed in 2007 shows that we gave an “intermediate” or “indeterminate” interpretation in less than 5% of our examinations.

I would like to refer Dr. Bury and other interested parties to a recent prospective comparison of ventilation–perfusion scintigraphy and CT angiography by Anderson et al. that showed a similar outcome for the 2 procedures (1). This comparison should also be of great assistance to nuclear medicine physicians and radiologists who are trying to convince their clinicians to cut down on the excessive use of CT angiography in studying patients with suspected pulmonary embolic disease.

REFERENCE

1. Anderson DR, Kahn SR, Rodger MA, et al. Computed tomographic pulmonary angiography vs ventilation-perfusion lung scanning in patients with suspected pulmonary embolism: a randomized controlled trial. *JAMA*. 2007;298:2743–2753.

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