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Pulmonary thrombo embolism in pregnancy.

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Sir,

We would like to compliment Drs Ezwawah et al on their article published in the IMJ last year exploring the current role of perfusion scanning in the diagnosis of pulmonary thromboembolism (PTE) in pregnancy¹. Low dose perfusion imaging is a valid option as the first line diagnostic test for pregnant patients with clinically suspected PTE. They report the use of low dose perfusion-only scintigraphy in 19 out of 21 pregnant women. All scans were considered to be of diagnostic quality and ventilation scanning was not required. No subsequent PTE was recorded in those with negative scans on follow up.

CTPA has been increasingly used to diagnose PTE in pregnancy. The British Thoracic Society recommends CTPA as the first-line investigation for non-massive PTE in the non pregnant population as its sensitivity and specificity is superior to V/Q imaging. It has the benefit of lower radiation exposure to the fetus and can identify other pathology, such as aortic dissection. The main disadvantage of CTPA is higher radiation dose to maternal breast tissue, which is associated with an increased lifetime risk of developing breast cancer. This is particularly relevant when only 5% of such investigations will have a positive result. V/Q scanning may be superior to CTPA in the diagnosis of small peripheral pulmonary emboli²⁻⁴.

Recent guidelines from the Royal College of Obstetricians and Gynaecologists state that women with suspected PTE should be advised that V/Q scanning carries a slightly increased risk of childhood cancer compared with CTPA (1/280,000 versus less than 1/1,000,000) but carries a lower risk of maternal breast cancer {lifetime risk increased by up to 13.6% with CTPA, background risk of 1/200 for study population}³. Women should be involved, where feasible, in the choice of investigation and informed consent should be obtained before these tests are undertaken.

We recently surveyed obstetricians with an interest in feto maternal medicine in all of the obstetric units in the Republic of Ireland. The response rate was 80%. The modality used to investigate possible PTE was CTPA in 8 units, perfusion scanning in 3 units and both methods in 6 units. The choice of investigation was largely influenced by the availability of the test on site. The survey shows that obstetricians do not have a preference for one test over another but the majority are using CTPA. The patients were not normally provided with a choice of investigation and were not counselled regarding the risks and benefits of each test. Based on our study and that of Ezwawah, we recommend that obstetricians give careful consideration to the choice of investigation they use for the diagnosis of PE in pregnancy. There is still a significant role for perfusion scanning despite the large scale introduction of CTPA and it is time for involving the woman in the choice of modality used with appropriate counselling.

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