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Lung alert

Increasing incidence of pulmonary embolism

The introduction of investigations like spiral CT scanning and D-dimer assay have altered the outcome of patients with pulmonary embolism in recent years. This study aimed to determine whether there had been a significant improvement in the diagnosis of pulmonary embolism and, consequently, a reduction in mortality with the advent of spiral CT.

The study population consisted of inpatients in Pennsylvania, USA between 1997 and 2001. Pregnant patients and those with pulmonary embolism admitted for the second time or later were excluded. The authors calculated the incidence of pulmonary embolism per year, population risk, proportion of patients undergoing scanning and inhospital mortality. The incidence of pulmonary embolism as well as population risk increased steadily from 1997 to 2001, with a mean increase of 0.004% per year for the former and 0.008% for the latter ($p<0.001$ for both). There was also a significant increase in the proportion of patients undergoing CT scanning, particularly spiral CT, which accounted for 71.2% of the scans in 2001 compared with 30.3% in 1997. The proportion of inhospital deaths was significantly lower in 2000 and subsequently than in the years up to and including 1999.

This study has highlighted the possibility of a rising incidence of pulmonary embolism due to spiral CT scanning leading to the increased diagnosis of small emboli—many of unclear significance. However, it is difficult to assess the role of other factors such as changes in physician index of suspicion. There is a need for further studies to look specifically at the relevance of such emboli and their long-term outcome.

► DeMonaco NA, Dang Q, Kapoor WN, *et al*. Pulmonary embolism incidence is increasing with use of spiral computed tomography. *Am J Med* 2008;**121**:611–7

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