can be used to distinguish between benign and malignant tumors. The injected RI disperses readily, moreover, making identification difficult, and deeply or dorsally located tumors are particularly difficult to delineate. These criticisms are not, however, correct. We experienced no cases in which a radioisotope that had been injected the day before the procedure dispersed, making tumor identification impossible. Furthermore, the RI probe was able to reach the entire lung surface, and we did not encounter any site-related difficulties with tumor identification. The only complications we encountered that were associated with the RI method were some minor cases of pneumothorax and intrapulmonary hemorrhage in a few patients.

We have not attempted ultrasonographic tumor identification, so we may not properly understand the technique, but we think that there may be a subset of tumors in which identification using ultrasonography is difficult. An example would be bronchioloalveolar carcinoma, a small tumor presenting as a faint shadow on CT scans. To identify such a tumor ultrasonographically, it would be necessary to collapse the lung completely. It might be difficult to identify a bronchioloalveolar carcinoma, which does not form an obvious mass, even in a completely collapsed lung.

As Carcoforo et al note, tumor identification using ultrasonography requires considerable training and expertise. The RI method is technically simpler and does not require any particular training or expertise. Both the ultrasonographic and RI methods of tumor identification can be considered as options for determining the position of masses that are difficult to distinguish macroscopically during surgery because they are small or present only as a faint shadow radiographically. The choice of method should be made according to the circumstances at each institution, and the expertise and preference of the proceduralist.

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REFERENCES


Term Ambiguity

To the Editor:

The recent article “Ratio Between Forced Expiratory Flow Between 25% and 75% of Vital Capacity [FEF25–75%] and FVC Is a Determinant of Airway Reactivity and Sensitivity to Methacholine” by Parker et al (July 2003) is confusing and perhaps misleading. Whereas the term vital capacity is in the title and present title was an editorial decision. In regard to the ambiguity of the title, the original title of the article was “FEF25–75% [forced expiratory flow between 25% and 75% of vital capacity]/FVC: Ratio Is a Determinant of Airway Reactivity and Sensitivity to Methacholine.” The change to its present title was an editorial decision.

The FEF25–75%/FVC ratio as an indicator of disproportionately small airways for a given lung size, was derived from the description by Mead and colleagues of airway-lung size dysanapsis. This was manifested as an inverse relationship between inspiratory volume and the product of the ratio of maximal flow at 50% of VC divided by VC and the static recoil pressure of the lung at 50% of VC (Pst[L]50). The FEF25–75%/FVC ratio may be reduced either by reducing the FEF25–75% or by increasing the FVC. Since this ratio is used to gain insight into the presence of dysanapsis, it does not matter whether the ratio is low because the person has small airways with a normal-sized lung (a

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To the Editor:

We thank Dr. Petty for his interest in our article (July 2003). In regard to the ambiguity of the title, the original title of the article was “FEF25–75% [forced expiratory flow between 25% and 75% of vital capacity]/FVC: Ratio Is a Determinant of Airway Reactivity and Sensitivity to Methacholine.” The change to its present title was an editorial decision.

The FEF25–75%/FVC ratio as an indicator of disproportionately small airways for a given lung size, was derived from the description by Mead and colleagues of airway-lung size dysanapsis. This was manifested as an inverse relationship between inspiratory volume and the product of the ratio of maximal flow at 50% of VC divided by VC and the static recoil pressure of the lung at 50% of VC (Pst[L]50). The FEF25–75%/FVC ratio may be reduced either by reducing the FEF25–75% or by increasing the FVC. Since this ratio is used to gain insight into the presence of dysanapsis, it does not matter whether the ratio is low because the person has small airways with a normal-sized lung (a
Dr. Pettys preference to use the FEV/vFVC ratio is well-understood. It has been well-described that subjects with airway obstruction, that is, a low FEV/vFVC ratio, are more likely to have airway hyperresponsiveness (AHR). We evaluated the association between the “new” ratio (ie, FEF<sub>25–75</sub>/FVC) and AHR because we believed that it describes a potentially different mechanism that leads to AHR. A low FEF<sub>25–75</sub>/FVC ratio may identify subjects who have relatively small airways for their lung size but do not have airway obstruction, whereas the FEV/vFVC ratio would identify subjects with airway obstruction.

The purpose of our article was not to advocate the use of FEF<sub>25–75</sub> or the FEF<sub>25–75</sub>/FVC ratio in the clinical interpretation of pulmonary function test results. We agree that these parameters have not been shown to be good predictors of the development of obstructive airway disease. Rather, the focus of our article was to demonstrate that small airway size relative to lung size was a more important determinant than the absolute airway size alone for AHR. This relationship between dysanapsis and AHR may provide another potential mechanism for the pathogenesis of asthma.

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Locating and Selecting Appraisal Studies for Reviews

To the Editor:

We have read with great interest the critical care review by Kreider and Lipson (July 2003) concerning bronchoscopy for atelectasis in the ICU. However, the authors used a single method of locating review articles, including only MEDLINE, and excluded other electronic databases. Currently, such a restricted search is generally not considered adequate. Studies have shown that only 30 to 80% of all known published randomized, controlled trials were identifiable using MEDLINE (depending on the area or specific question). A comprehensive search is important not only for ensuring that as many studies as possible are identified, but also to minimize any selection bias for those that are found. Relying exclusively on a MEDLINE search may retrieve a set of reports unrepresentative of all reports that would have been identified through a comprehensive search of several sources. To prevent bias and to ensure that all relevant data are included in a review, it is fundamental to use multiple sources such as EMBASE, Best Evidence, and the Cochrane Library to identify studies and then to use a systematic approach to select those that will be included.

Another electronic database is LILACS for Latin America and the Caribbean, which indexes regional literature that contains 270,244 (40th edition, May 2001) citations of literature published since 1982 and abstracts in English, Portuguese, and Spanish. The US National Library of Medicine medical subject headings (MeSH) vocabulary is used to index each LILACS citation. LILACS is edited by BIREME (Latin-American and Caribbean Health Science Information Center), an agency of the Pan American Health Organization/World Health Organization, located in São Paulo City, Brazil. Of the 670 journals indexed in LILACS, only 45 overlap with those indexed in MEDLINE.

Searching in LILACS according to the strategy proposed by the Cochrane Collaboration of the same terms (bronchoscopy, atelectasis, ICU, and critical illness) used by Kreider and Lipson for randomized, controlled trials, allowed the retrieval of two other citations. They may or may not reinforce the conclusions reached by authors, but our point is to stress that any search strategy of systematic or narrative reviews can and should include LILACS as an obligatory database.

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