Communications for this section will be published as space and priorities permit. The comments should not exceed 500 words in length, with a maximum of five references; one figure or table can be printed. Exceptions may occur under particular circumstances. Contributions may include comments on articles published in this periodical, or they may be reports of unique educational character. Specific permission to publish should be cited in a covering letter or appended as a postscript.

Diagnostic Procedures for Pulmonary Lesions

To the Editor:

As each diagnostic technique enters the medical scene, there is an enthusiastic flood of articles extolling its virtues. This is then followed by a second wave of articles defining limitations, indications, and complications.

In the article entitled "The Effect of Tumor Size and Location on Diagnosis by Fiberoptic Bronchoscopy," Stringfield et al.1 examined the results of the fiberoptic bronchoscopic procedure, based on the size and location of the lesion. As in other studies, the value of the fiberoptic bronchoscopic procedure for proximal endobronchial lesions was confirmed. When the lesion was less than 2 cm in size and was 2 to 6 cm from the hilum, the fiberoptic bronchoscopic procedure was successful in identifying cancer in 48 percent (14/29) of cases. When any lesion, regardless of size, was greater than 6 cm from the hilum, the rate of successful diagnosis dropped to 20 percent (1/5). Stringfield et al.2 then explored the value of various endobronchial techniques in recovering cytologic material. They finally concluded: "The data support the continued use of multiple types of tissue sampling techniques, including biopsy, brushing, and washing, since these results improve when all techniques are employed."1

The rates of successful diagnosis of 48 percent (14/29) with midlung lesions and of 20 percent (1/5) with peripheral lesions suggest other conclusions. If the lesion is in the outer half of the lung, percutaneous biopsy via aspiration with a needle is a more logical diagnostic approach. In a recent review of techniques of closed biopsy at multiple medical centers, Herman and Hessel3 reported a rate of success of 82 percent for biopsy via aspiration with a needle vs an overall rate of success of 56 percent for transbronchial biopsy. Although these investigators3 did not break the results down by region, undoubtedly percutaneous pulmonary aspiration was the most successful with peripheral lesions, whereas the fiberoptic bronchoscopic procedure was most successful with proximal lesions. Mortality for percutaneous pulmonary aspiration was 0.1 percent vs 0.3 percent for fiberoptic bronchoscopic procedures. As expected, pneumothorax was more frequent with percutaneous pulmonary aspiration.

Sagel4 reported an overall rate of success of 95 percent using biopsy via aspiration with a needle. Using a percutaneous approach and a new needle (Rotex), House and Thompson5 reported a correct diagnosis of tumor in 55 of 57 cases.

Thus, it appears that the two procedures are complimentary. For lesions in the proximal half of the lung, fiberoptic bronchoscopy is the procedure of choice for high yield and low morbidity. Lesions in the peripheral half of the lung or those suspected of being metastatic (and thus not endobronchial) are better handled by percutaneous pulmonary aspiration.

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References

Pneumothorax and Metastatic Sarcomas

To the Editor:

I read with interest the editorial by Leroy Hyde, M.D., entitled "Pneumothorax: A Rare Manifestation of Lung Cancer."1 I certainly concur that spontaneous pneumothorax is extremely rare in primary bronchogenic carcinoma. Spontaneous pneumothorax is usually seen in young male patients and is usually caused by a rupture of a pleural bleb. When we2 reviewed our experience with spontaneous pneumothorax in patients with emphysema, we were amazed that pneumothorax in emphysema was not more common.

I am writing because I take issue with Hyde's3 comments that spontaneous pneumothorax cannot be considered more than a rare manifestation of underlying malignant disease and that when this rare combination occurs, the patient will almost always be more than 40 years of age. I think that spontaneous pneumothorax is not that rare with metastatic sarcomas. We4 reported the findings in five patients with spontaneous pneumothorax associated with metastatic sarcomas in 1973, and since that time, I have seen six additional patients. I think that this is an important association and can be seen in very