Communications to the Editor

Communications for this section will be published as space and priorities permit. The comments should not exceed 350 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.

Transbronchial Lung Biopsy without Fluoroscopy

To the Editor:

We were interested by the article of Puar et al (Chest 1985; 87:303) who reported the results of their experience with transbronchial lung biopsies in sarcoidosis without the aid of fluoroscopic examination.

In the past few years we performed transbronchial biopsies (TBB) without the aid of fluoroscopic examination, according to the technique described by Scheinorn,1 not only in sarcoidosis but also in various infiltrative lung diseases, mainly diffuse.

Between January, 1980 and May, 1985, 46 patients were submitted for TBB. Biopsy samples were obtained from the area of greatest radiologic abnormality or, when infiltrates were uniform and absent from the basilar segments, from the right lower lobe. At least three, and usually four, specimens were obtained.

In two patients, five biopsy procedures were technical failures in that they contained no lung tissue. In the remaining patients, transbronchial lung biopsy was diagnostic in 24 (55 percent) (Table 1). The overall diagnostic success of TBB is lower than that reported by other investigators.1 This can be explained by inadequate indication for TBB and absence of systematic bacteriologic studies in seven patients with abnormal chest roentgenographic results and non-diagnostic TBB; if we excluded these patients, the yield increased from 55 to 65 percent accuracy, a result comparable to other series. Only one of these seven patients was submitted for an open biopsy procedure, which revealed non-specific reactivity.

The achievement of 83 percent accuracy in sarcoidosis concurs with previous reports.

Complications of TBB were infrequent. Three patients (6.8 percent) had minor hemorrhage estimated to be less than 100 ml. In only one patient was it severe enough to interfere with completion of the procedure. One pneumothorax occurred (2.2 percent) which did not require chest intubation.

In this case, TBB was performed in the right upper lobe. The incidence of pneumothorax in our series is similar to that reported by Puar et al.

Vasovagal reactions which necessitated interruption of the procedure occurred in two patients (4.5 percent) at the first biopsy (one case of non-diagnostic sarcoidosis).

We agree with the conclusions expressed by Puar et al. Transbronchial lung biopsies can be safely performed without fluoroscopic examination in the hands of experienced physicians. Indications must not only be restricted to suspected sarcoidosis, but also extended to other diffuse or more localized infiltrative lung diseases.

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REFERENCES

1 Scheinorn DJ, Joyner LR, Witoomb ME. Transbronchial forceps lung biopsy through the fiberoptic bronchoscope in Pneumocystis carini pneumonia. Chest 1974; 66:294-95

To the Editor:

The letter from Drs. Prigogine and Schmerber confirms and extends many of our observations on the safety and selective diagnostic value of transbronchial lung biopsies without fluoroscopic examination in patients with diffuse lung diseases. They were technically able to obtain transbronchial lung biopsy tissue in 44 of 46 attempted patients, a very good yield. As in our series, complications were infrequent and minor—three hemorrhages, each less than 100 ml and one pneumothorax which did not require chest tube thoracostomy drainage.

Their overall diagnostic success in only 24 of 44 patients (55 percent) was lower than that reported by other investigators and may have reflected the more varied etiologies represented in their patient population. We noted that sarcoidosis is frequently a diffuse granulomatous disease involving not only the alveolar tissue but also the bronchial tree, so that the diagnosis may be provided from either the transbronchial alveolar specimen or the peripheral bronchial muscosa obtained during the same biopsy procedure. In the great variety of infiltrative diseases evaluated by Prigogine and Schmerber, both the alveoli and bronchioles may not have been always involved, thus partially explaining their lower diagnostic rate.
We do agree that transbronchial lung biopsies without fluoroscopic study can be safely and selectively performed in both sarcoidosis and other diffuse infiltrative lung diseases.

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**Breakage of the Wire Cytology Brush During Fiberoptic Bronchoscopy**

To the Editor:

We read with interest the letter by Doctor Sanders (Chest 1983;83:935-36) regarding separation of the wire cytology brush from its attachment to the wire guide during bronchoscopy, and the letters by Doctors Malik and Behera (Chest 1984;85:537-38 and Chest 1985;86:147), Masa-Jimenez et al, and Weissberg (Chest 1985;86:156) regarding breakage of alligator forceps during bronchoscopy.

We have experienced breakage of the wire cytology brush (Olympus BC-10C) while performing fiberoptic bronchoscopy (Olympus BF-ITR) in a 58-year-old woman with pulmonary density which proved to be infectious. The 1.8 cm tip of the brush/wire was lost in the parenchyma of the right medial lobe beyond the view of the bronchoscopist.

The foreign body presented itself on X-ray film (Fig 1). Under fluoroscopic guidance, it was removed from the medial segmental bronchus in the right medial lobe with a forceps (FB-19C-S) through a fiberoptic bronchoscope.

We have been able to sort out the exact reason for the breakage.

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**Junctional Ectopic Tachycardia in Adults: Role of Triggered Activity**

To the Editor:

Rapid junctional ectopic tachycardia has been described in infancy. Typical features include a rapid, irregular heart rate and atrioventricular dissociation. In a recent report, Ruder et al describe five adults with junctional ectopic tachycardia, reporting detailed analysis of the ECGs, electrophysiologic studies and response to therapy. The authors affirm that this arrhythmia has not been previously described in adults and that, in their experience, it appears to be not responsive to verapamil therapy. Arrhythmia responded somewhat to β-blocker therapy, suggesting that, in these cases, abnormal automaticity due to sympathetic overactivity might be the mechanism of the arrhythmia. Conversely, our previous experience, while confirming the benign course of arrhythmia in adults, provides indirect evidence that, in some patients, triggered activity may be the tachycardia mechanism. Indeed, therapy with intravenous verapamil (8 mg) promptly slowed the junctional focus rate so that capture of ventricles by sinus impulses occurred. Irregularity of junctional pacemaker rate in association with atrioventricular dissociation suggested the diagnosis of junctional ectopic tachycardia. In addition, the acceleration of junctional focus from 120 to 150/min in all probability induced a Wenckebach block from the ectopic focus, as suggested by the cycle length alternation phenomenon. The cycle length alternation, in our case, was not due to double nodal pathway because the tachycardia rate was irregular even during the cycle length alternation phenomenon. Finally, the verapamil therapy did not stop the arrhythmia but slowed the junctional pacemaker rate so that capture of ventricles by sinus impulses occurred.

The patient had been asymptomatic before the arrhythmia occurrence and in all probability tachycardia was related to catheter manipulations. Although normal junctional automaticity in human subjects seems to be insensitive to treatment with verapamil, it is not improbable that in some patients these interventions may trigger

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**Figure 1.** Fragment of wire cytology brush shown on x-ray film and after removal.