Transbronchial Lung Biopsy: Variations on a Theme

A high yield, low risk biopsy method for diagnosing pulmonary diseases should decrease the need for diagnostic thoracotomy and needle biopsy (aspiration, cutting or trephine). Transbronchial lung biopsy was developed by Andersen and colleagues\(^1,2\) utilizing a blunt, flexible forceps passed through a rigid bronchoscope without fluoroscopic guidance. Pleural pain was utilized to indicate that the forceps had been passed too far. In their extensive experience, the diagnostic yield in diffuse pulmonary disease has been good and the frequency of complications acceptable.\(^3\) Transbronchial lung biopsy has been performed without bronchoscopy utilizing fluoroscopically guided catheters to obtain biopsy specimens in the diagnosis of solitary peripheral lesions.\(^4\)

We have previously reported the feasibility of utilizing the fiberoptic bronchoscope and its biopsy forceps for performing transbronchial lung biopsy.\(^5\) Under fluoroscopic guidance, this technique has provided good diagnostic results in both diffuse and localized pulmonary lesions. In this issue the results of 107 consecutive patients, both stable and acutely ill, subjected to transbronchial lung biopsy by this technique are reported. In addition, Joyner and Scheinhorn\(^6\) reported their further experience with transbronchial lung biopsy in diffuse disease without the use of fluoroscopy. The safety and simplicity of their modification are emphasized in that carefully selected outpatients were also biopsied in their series.

It is evident that transbronchial lung biopsy via either the rigid or flexible bronroscope is a safe procedure with good diagnostic yield in diffuse lung disease. With the addition of fluoroscopy, the technique provides good results with localized lesions. Transbronchial lung biopsy can be adapted to a wide spectrum of diagnostic problems and clinical situations, provided the endoscopist remains as flexible as the instrument that has facilitated the procedures. The next phase of transbronchial lung biopsy must include close cooperation with the biochemist, immunologist and pathologist to investigate etiology and pathogenesis of lung disease.

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REFERENCES