**Bronchofiberscopy—Fiberoptic Bronchoscopy**

Without doubt, the development of the flexible bronchofiberscope by Ikeda\(^1\) has been one of the most significant advances in diagnosis and treatment of pulmonary diseases in the last decade. By extending the range of endoscopic examination and by simplifying the procedure for patients and physicians, this instrument has gained wide acceptance and now probably exceeds open-tube bronchoscopy in general application. With experience, certain principles have been established and techniques refined to permit increased accuracy for diagnosis and improved safety for patients. The recent review by Sackner\(^2\) summarizes much of the current literature in this field.

In this issue of *Chest*, Zavala (see page 12) reports a large personal series of cases that illustrate how well the art has developed. His precise description of techniques and attention to details should serve as a model for practitioners and students of bronchoscopy.

Although initially applied as a telescope through an open rigid bronchoscope and later commonly used as a transnasal instrument, Zavala's method of insertion of the bronchofiberscope via an orally placed endotracheal tube offers major advantages when the goal of examination is sampling and specimen collection from the tracheobronchial tree. The repeated insertion and withdrawal of various brushes, curets, and forceps, as described by Zavala, can be accomplished most effectively by this technique.

Another important point is made, and that is, the proper handling and processing of specimens. For optimal benefit to the patient, coordination of the skills of a bronchoscopist, microbiologist, cytopathologist, and histopathologist is required. When the endoscopist is not a thoracic surgeon, surgical consultation should be obtained early to help integrate diagnostic and therapeutic efforts and to avoid unnecessary duplication.

Special interest is focused on the 55 patients with hemoptysis and roentgenograms of the chest with no evidence of abnormality. Of these 55 patients, nine were found to have endobronchial tumors and three had carcinomas of the upper respiratory tract. Obviously, a false sense of security must not result from the report of a normal roentgenogram of the chest, but in all high-risk patients any symptom arousing suspicion must be regarded ominously and investigated thoroughly. This group of radiographically occult cancer patients presents a special challenge to the endoscopist if early treatment is to be accomplished. The report from the Mayo Lung Project\(^3\) gives further hope that earlier detection can indeed identify patients amenable to treatment at a more favorable stage than formerly expected in bronchogenic carcinoma. Aggressive investigation of these high-risk patients, including the use of the bronchofiberscope, currently offers the best hope for salvaging lives from this frustrating disease. Dissemination of the techniques and skills described by Zavala will do much to enhance our present attack on the problem of lung cancer.

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**Tuberculosis: Reentering the Mainstream**

As morbidity and mortality from tuberculosis decrease, its importance as a national health problem diminishes. Practical and political considerations divert national, state, and local jurisdictional fundings of "health dollars" to more newsworthy priorities. "Voluntary" tuberculosis associations are now "lung" associations. Federal project grants specifically for tuberculosis programs have been discontinued, and jurisdictions must use local funds or vie for Federal block grant funds to the exclusion of other programs.

Alarmists, vested interests, and others decry the decline in still-needed programs and warn that case rates will rise. Realistically, however, one must acknowledge that tuberculosis is reentering the mainstream of medicine and the delivery of health care. Is an infrastructure sensibly needed to support a single infectious and manageable disease with clinics, professional staffing, and voluntary associations so narrowly oriented and without logical suprastructure? As the jurisdictions and voluntary associations recognize changing priorities, the medical profession itself must follow suit and responsibly

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react to firmly established concepts of tuberculosis care and control.\textsuperscript{1}

Resistance persists. Of 47 states responding to questionnaires in September, 1973,\textsuperscript{2,15} indicated that their tuberculosis sanatoria had closed; their tuberculosis patients are followed as outpatients or in general hospitals, if necessary. Fourteen states still maintain sanatoria but also use general hospitals for some tuberculosis patients, but 17 confine tuberculosis solely to specifically designated hospitals. These last groups obviously do not acknowledge the specific and studied recent statements of the American Thoracic Society,\textsuperscript{3} the American Hospital Association,\textsuperscript{4} and the American College of Chest Physicians\textsuperscript{5} that, when hospitalization is necessary, tuberculosis should be handled in general hospitals.

Snider's article, "Reactivation of Tuberculosis in Oklahoma, 1970-1973," which appears in this issue of Chest, (see page 36) is a refreshing addition to the series of articles documenting the fact that most reactivated cases of tuberculosis occur in patients not adequately treated from onset. Conversely, tuberculosis patients adequately treated may be discharged following full therapy and not obliged to be followed up. That this study was done within a state jurisdiction with rural input enhances its importance. Previous reports, as cited by Snider, typify urban centers such as St. Louis, New York, Milwaukee, and New Orleans. Explicitly and implicitly they indicate that, as the British Medical Research Council suggested in 1969,\textsuperscript{6} resources from routine long-term follow-up might better be concentrated on the high-priority, newly developed, bacteriologically-positive cases and their contacts. Similarly, the Tuberculosis Advisory Committee of the National Center for Disease Control\textsuperscript{7} has stated that lifelong follow-up of such adequately treated patients perpetuates wasted use of professional resources and diverts them from other crucial needs.

These articles add evidence that dispels the myth that tuberculosis is a unique lifelong affliction requiring consideration special from other medical conditions. Under modern therapy the word, "cure," applies to tuberculosis.

Besides the philosophic importance of Snider's article, its deeper meaning is that ongoing, high-priority, meaningful programs can be reasonably planned, implemented, and evaluated without continuing need for new funding.\textsuperscript{8} Reevaluation of programs based on the data of Snider and others, indicates that considerable unnecessary expenditures in tuberculosis control accrue in the United States today and that reconsideration of priorities in this field may be rewarding. In addition to discharge from follow-up of adequately treated tuberculosis patients, the following measures are surprisingly productive as high-priority programs: one-year preventive therapy rather than lifelong recall of old calcific roentgenographic infiltrates never previously adequately treated; comprehensive pulmonary disease clinics in place of categoric tuberculosis clinics; closure of state sanatoria with movement of tuberculosis patients to comprehensive outpatient follow-up facilities and general hospitals when necessary; and substitution of tuberculin-testing for mass or walk-in radiologic screening facilities. These high-priority programs would continue to divert tuberculosis care and control back to the mainstream of medicine. They would also make tuberculosis programs more relevant and responsive to 1975 and more self-supporting with minimal dependence on outside resources.

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