enthusiastically welcomes your membership. An invitation to each member has been mailed.

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Interested ACCP Fellows may write the Sections and Forums Office, 911 Busse Highway, Park Ridge, Illinois, for information.

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Bronchoscopy for Endoscopically Visible Carcinoma of the Lung

The introduction of the flexible fiberoptic bronchoscope (FFB) has revolutionized the endoscopic examination of the tracheobronchial tree. The ease of introduction, its use and adaptability as an office procedure, and the greatly expanded indications for its use as a diagnostic and therapeutic tool has made the FFB an instrument used as frequently by pulmonologist as by thoracic surgeons.

The early diagnosis and treatment of many infiltrative diseases made possible by this technique has changed the concept and curability of many of these disease states. The volume of literature in this vein in recent years attests to the fact.

There is, however, the patient who presents with x-ray film findings of a mass lesion or hemoptysis where carcinoma heads the list of differential diagnosis. The pervading pessimism as to survival in such patients is all too common among physicians. The article by Shure and Astarita in this issue (see page 865) presents an erudite scientific project planned to prove that five biopsy specimens are enough to provide a diagnosis. This was written to dispute a previous article claiming that nine biopsies were needed in the case of an endobronchial tumor.

This editorial raises the question: Which specialist should most appropriately perform the diagnostic test in a given situation?

Delays in treatment have resulted from nondiagnostic endoscopies. When carcinoma is suspected, rapid determination of cell type and extent of disease is mandatory. For lung cancer, surgery is the only treatment modality with any long-term survival rate. Resected stage I nonsmall cell lung cancer patients now have a 50 percent chance of surviving for more than five years. Stage 3 with mediastinal node involvement limited to the ipsilateral chest and completely resected has a 20 percent five-year survival rate. These results are achieved only with prompt diagnosis and treatment. Endoscopy is essential in the preoperative work-up and must be done by the operating surgeon. Planning incisions, sleeve resections, and assessment of the remainder of the lung are facts the surgeon must have first-hand. Needless repetition of endoscopies can be avoided if referral is made promptly when the diagnosis of lung carcinoma is strongly suspected. A biopsy specimen obtained in the operating room can be confirmed from frozen section in minutes. Five or nine biopsies are unnecessary!

If we hope to maintain and even to improve the present survival rates for lung carcinoma, combined efforts by all physicians who see and treat these patients is needed.

The greatest beneficiary in this interdisciplinary approach will be the person who counts the most—the patient.

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REFERENCES


Regression of Left Ventricular Hypertrophy after Intervention?

Cardiac hypertrophy implies an increase in the muscle mass of the heart associated with an enlargement of some muscle fibers. As echocardiography (echo) allows direct measurements of free ventricular wall thickness, it is not surprising that echo has proven to be more reliable than ECG in diagnosing ventricular hypertrophy. In the January issue of Chest, (83:56–62) Cueto-Garcia and associates report regression in left ventricular mass (LV mass) and left ventricular wall thickness (LVWT) 3 to 66 weeks after

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renal transplantation. Reduction in LV mass, LVWT, and septal thickness (IVST) on echo have been reported after valve replacement in aortic valve disease and after drug therapy in hypertensive patients. Angiographic data also documented reduction in LV mass by 19 ± 12 months after aortic valve surgery. That these reductions in the LVWT and LV mass indicate regression of left ventricular hypertrophy (LVH) is supported by normalization of ECG and chest x-ray film after successful surgery in some patients. In rats, the LV mass reduced after removal of the provoking stimulus like hypertension, hyperthyroidism, coarctation, or anemia. The increased levels of RNA and hydroxyproline present in the hypertrophied myocardium decreased with regression in the LV mass.

Despite impressive reductions in LV mass (>200 g), it does not return to normal levels in the majority of patients after a successful intervention. The regression of LV mass also does not assure a complete normalization of LV function. It is possible that LVH initiated early in life is of such a character that it can only, to a fairly minor extent, be reversed or prevented by an intervention late in life. Part of the explanation may be a substantial contribution of myocardial hyperplasia, in association with a genetically-linked predisposition to structural cardiovascular adaptation, either "inherent" in the effectors and/or caused by "trophic" influences of a hormonal and/or transmitter nature. It is also possible that regression of hypertrophy is limited by myocardial fibrosis which accompanies advanced cardiac disease.

The simplicity, reproducibility, low cost, and wide familiarity of the ECG technique make it a desirable tool for conducting serial studies on regression of LVH, but ECG changes are influenced by several noncardiac factors besides hypertrophy. Furthermore, even when the ECG reflects changes of LVH, it does not allow accurate quantitation of alterations in LV mass. Echo estimate of LV mass is dependent on inherent assumptions regarding LV geometry which may change due to the effect of the intervention. To avoid the effect of LV geometry, the LV muscle cross-sectional area has been used as an index of LV mass and showed reduction 6 to 12 months after aortic valve replacement. The echo IVST and LVWT can accurately reflect LVH only if the LVH occurs in a uniform manner. In animals, the LVWT and IVST measurements by echo have been shown to change in minutes by alterations in coronary blood flow, ischemia, and drugs. Similar changes are possible in patients, and thus, theoretically render these measurements less than reliable in evaluating cardiac hypertrophy on a serial basis. Furthermore, the techniques of ECG, echo, and angiography are unable to distinguish myocardium from connective or scar tissue present in a hypertrophied heart. The technique of computerized tomographic scanning has been shown to be promising for determination of LV mass in dogs; however, its use in man is awaited.

Presence of LVH on the ECG and echo has prognostic implications. The ECG LVH in the Framingham study was indicative of a grave prognosis with a resultant 59 percent mortality in 12 years. Echo LVH indicated an increased duration and severity of hypertension, higher prevalence of heart failure, and more marked cardiomegaly in symptomatic hypertensive patients. Evidence of regression of LVH is a welcome development. It is now important to prove that this regression of LVH after an intervention will also improve the prognosis of these cardiac and hypertensive patients.

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Educating Tomorrow's Chest Physician
An International Challenge

A special session for teachers of pulmonary medicine was held during the X1Vth World Congress on Diseases of the Chest and 48th Annual Scientific Assembly in Toronto. One hundred forty directors of pulmonary training programs from North America and 43 countries overseas participated in a two-hour program which was designed to review issues and challenges in educating the chest physician of the future. Presentations by Dick D. Briggs, Chairman of the ACCP/ATS Committee of the National Residency Matching Plan (for the Pulmonary Disease Subspecialty), reviewed the North American program and the results of the first NRMP match. Tables 1 and 2 summarize the results of the first coordinated nationwide program. In brief, 90 percent of candidates and program directors secured their selections within their top three choices. The overwhelming majority of selections were either first or second choices. In all, the program went smoothly and served both the candidate and the program director well. This is the first successful matching program for any medical subspecialty.

Presentations by Professors Ann Woolcock of Australia and Israel Bruderman of Israel reviewed the structure of pulmonary training in two other countries. In these instances a less formalized selection process is required due in part to the limited number of physicians and programs available in these two countries (14 in Australia, three in Israel).

The remainder of the evening session was an interactive exchange with both American leaders and visitors from other countries reviewing their approaches to training and education, with emphasis on suggestions to better serve the career development of tomorrow's leaders in chest medicine. Particular emphasis was placed on the role that the American College of Chest Physicians can play in the continuing education of these young leaders. Feedback to the authors from most of the 29 round-table discussants included:

1. There was a great need to continue to train pulmonary academicians who, in turn, will train primary care physicians. It is the primary care physician, ie, internist, family practitioner, pediatrician, and in some cases obstetrician, who will be the first to deal with pulmonary symptoms. These individuals are in the best position to develop a health-oriented prevention approach based on a careful evaluation of symptoms such as cough and dyspnea and to use spirometry to detect early abnormalities in lung function. Stopping smoking will be most effectively accomplished in each physician's own offices.

2. Related to the above is the necessity of a strong core faculty for educating primary care physicians in our medical schools throughout the world.

3. We should get rid of the word "training," which is appropriate for the training of pets and sometimes children, in favor of the word "education." After all, we may be overemphasizing things which will be relatively unimportant in the future and simultaneously failing to deal with issues of grave importance as this decade and, indeed, century come to an end. Fostering the education of our candidates is the proper concept. We must teach problem-solving, decision-making, and communications skills in our approach to career development.

4. A great need to foster exchange programs exists in some countries. Providing the mechanism for 6-, 12-, or even 24-month educational experiences in North America would serve the needs of many countries very well. Perhaps faculty exchange programs could also be developed.

5. The preeminent position of the American College of Chest Physicians in graduate education was noted by many. The position of the College has always been the education of its members and the improvement of health care delivery via education. Noteworthy among our recent achievements have been the

| Table 1—Respiratory Disease Fellowship Matching Program June 2, 1982 Match for 1983 Fellowships |

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| Table 2—June 2, 1982, Fellowship Matching Program |

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