Special Lecture

The Status of Bronchoesophagology in the United States:
Focus on Japanese-American Cooperation

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I wish to express my deepest appreciation to your president, Dr. Shigeto Ikeda, and to the Japan Broncho-Esophagological Society (JBES) for the great honor of your invitation to this meeting. My wife, Evelyn, joins me in saying a very special “domo arigato” for the privilege of joining you for this annual meeting.

This is a significant occasion for several reasons. First, of course, is the fact that this is the 39th annual meeting of the JBES, which, if my research is correct, is the largest national bronchoesophagological society in the world. Second, this is the year of the presidency of Dr. Shigeto Ikeda, who has contributed so much to the technologic advancement of our specialty and who has taught so many physicians from all over the world. And third is the unique opportunity I have to bring you greetings from the American Broncho-Esophagological Association in our 70th anniversary year.

I was asked to discuss the status of broncho-esophagology in the United States, and to do so I need to present some historical perspectives. In the early years of this century, Dr. Chevalier Jackson was practicing medicine in Pittsburgh, Pennsylvania, and began developing great expertise in removal of foreign bodies from the air and food passages. In 1916, Dr. Jackson moved to Philadelphia, which incidentally was the birthplace of our American Constitution, the bicentennial of which is being celebrated this year. In the following years, Philadelphia was to become famous in medical circles as the cradle of knowledge and training for American bronchoesophagologists. It was in 1917 that Dr. Chevalier Jackson and his friend Dr. Hubert Arrowsmith invited a number of their professional colleagues together to found what initially was called the "Association of American Peroral Endoscopists." That somewhat cumbersome title was changed in 1921 to the American Bronchoscopic Society. However, the very same physicians who worked in the larynx and bronchial tree also continued caring for patients with disorders of the esophagus. The name of the organization was changed again in 1939 to reflect the esophageal interests and became more accurately descriptive by use of the Greek ending logos, or study, rather than skopion, meaning viewing.

Presented at the 39th annual meeting of the Japan Broncho-esophagological Society, Tokyo, Japan, October 22, 1987.
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Thus, since 1939 that organization has been known by its present name, the American Broncho-Esophagological Association (ABEA).

In the 1920s and 1930s, the ABEA served as an influential force for education and for improving standards for manufacturers toward prevention of foreign body accidents and caustic ingestions. Placing of the poison symbol, consisting of the skull and crossbones, on hazardous products was one of the first consumer protection legislation achievements, for which Dr. Chevalier Jackson deserved much of the credit. The ABEA has always remained a relatively small society with rather rigid membership requirements, and many of its members are from the ranks of academic medicine. At our spring meeting this year, the ABEA had 170 active, 102 senior, 12 honorary, and 47 corresponding members. It is noteworthy that two of our honorary members are distinguished members of your Society, Dr. Jo Ono and Dr. Shigeto Ikeda, and four of our corresponding members are eminent Japanese endoscopists.

To complete this background, I would return to the year 1934, when Dr. Rudolph Schindler left Germany to come to the University of Chicago and join the faculty in the division of gastroenterology. Dr. Schindler had been active in developing gastroscopes in the 1920s and, after moving to Chicago, greatly stimulated interest in that instrument and gastroscopy in the United States. In the fall of 1941, he invited several friends to his home, and the evening culminated in the founding of the American Gastroscopic Club, with Dr. Schindler as its first president. In 1946, the organization was officially incorporated and the name changed to the American Gastroscopic Society. That name endured until 1961, when it was changed again to the broader, all-inclusive American Society for Gastrointestinal Endoscopy (ASGE).

From its small, intimate beginnings, the ASGE has become a large organization interested in all aspects of gastroenterologic endoscopy. The gastrocamera was introduced in Japan in the 1950s by Dr. Tatsumo Uji, Dr. Tasaka, in Japan, and Dr. Basil Hirschowitz, in the United States, introduced the flexible fiberoptic gastroscope in 1959. There has been progressive interest in upper gastrointestinal endoscopy ever since, as indicated by the growth of the ASGE. The organization had 230 members in 1962, the year that Dr. Arthur Olsen was president, reached 1,000 in 1975, and now has over 3,500 members. In the United States, the upper alimentary tract has become almost entirely the province of gastroenterologists rather than of the more broadly trained bronchoesophagologists.

Similarly, the evolution of flexible bronchofibroscopy has vastly extended the utilization of bronchoscopy by pulmonary physicians, intensive care specialists, thoracic surgeons, and pediatric pulmonologists as well as by otolaryngologists interested in endoscopy. There are now 4,547 physicians certified by the American Board of Pulmonary Disease, and nearly all of them use bronchofibroscopy in their practice.

This background sets the stage for a look at the status of bronchoesophagology in the United States today. I must report to you that it is both healthy, because of the interest in its separate elements, and not so well, insofar as fragmentation has detracted from the traditions of common expertise of earlier years.

First, I know many who believe, and I share this opinion, that there is justification for maintaining organizations such as the JBES and our own ABEA, whose focus is bronchoesophagology in all its aspects. The embryology, physiology, pathology, and clinical diagnosis
and treatment of disorders involving the air and food passages make it logical that a common focus be maintained by physicians who deal with patients who have these problems. The original name coined by Chevalier Jackson nearly 70 years ago, the Association of American Peroral Endoscopists, serves to remind us of this united focus.

However, it is with some degree of sadness that I report to you my opinion that bronchology and esophagology are likely to remain separated among specialists with different interests and separate training programs. I doubt that we will see in the United States a return to the patterns of training and practice exemplified by the Jacksons, father and son; Edwin Broyles; Gabriel Tucker, Senior and Junior; Joseph Adkins; Louis Clerf; Charles Norris; Herman Moersch; Arthur Olsen; and Paul Holinger, to name some of the great teachers of peroral endoscopy.

The vast majority of otolaryngologists in the United States are busily engaged in other aspects of their specialty, with the exception of a few centers where pediatric laryngology and bronchoesophagology maintain a strong presence. Bronchoscopy and bronchology are now practiced almost entirely by physicians trained in pulmonary and critical care medicine. Similarly, gastroenterologists have largely taken over diagnostic and therapeutic procedures in the esophagus, and even in pediatric practice, gastroenterologists are managing many of the esophageal problems traditionally handled by bronchoesophagologists.

This brings me to a concern about a major problem we face, which is to ensure adequate training for our successors. As more and more fragmentation among specialties develops in the United States, a sufficient volume of clinical material for adequate training becomes difficult to maintain within many residency programs.

Despite improvements in safety standards and awareness over the years, problems of swallowed or aspirated foreign bodies and caustic ingestion continue to occur and must be managed with the same skill our predecessors exhibited.

Separation of esophageal work in the gastroenterology training programs, development of adult diagnostic bronchoscopy by pulmonary specialists, and the concentrated expertise of pediatric management in a limited number of outstanding children's hospitals have left us with a shortage of completely trained bronchoesophagologists.

I see no ready solution to this problem but can only hope we will always seek what is best for our patients, place safety and excellence of care above pride and economic motives, and refer individual patients to the place at which they can obtain the very best of medical care.

I see this hope as particularly vital in pediatric practice. There is simply not enough clinical material in all the residency training programs to have each resident in all the related specialties develop the experience and dexterity to manage the very young patient. We need to realize that a child is not simply a smaller-sized version of an adult patient and to refer those patients to wherever that experience and skill exist.

Next, I would like to briefly highlight four areas of current interest and research in bronchology in the United States.

Lung cancer continues to rise rapidly in incidence in both men and women throughout the world and is the leading cancer killer in the United States in both sexes. Diagnostic applications of bronchoscopy now extend beyond the tracheobronchial tree to include needle aspiration samples from the mediastinal lymph nodes and peripheral mass lesions. Therapeutic interest is high in two laser applications with which you are familiar, the neodymium:
yttrium-aluminum-garnet laser for cauterizing and vaporizing obstructing lesions and the combination of photosensitizing chemicals, such as hematoporphyrin derivative, with light.

Pulmonary infections are currently of great interest to endoscopists in the United States, especially with the growing epidemic of acquired immune deficiency syndrome (AIDS). Bronchoscopic brushings, alveolar lavage, and transbronchial lung biopsy are accepted practice for investigating these problems. Heightened awareness of the risks for physicians and health workers poses new challenges for sterile techniques and safety as we try to help these unfortunate patients.

Diffuse lung diseases present another broad area of challenge and opportunity for bronchoscopists. Access to the peripheral lung structures with bronchoalveolar lavage is valuable for research and offers new ways to understand the mechanisms of many of these diseases. Bronchoalveolar lavage has proven a safe technique with very wide application in these patients.

Critical care medicine is another broad area of practice in which the airway often becomes the focus of greatest concern and the lungs the most important determinant of patient survival. Bronchoscopy gives access to the airway for suctioning secretions, obtaining diagnostic samples, and evaluating complicating events.

I should like to close by observing some aspects of Japanese-American cooperation in the field of bronchoesophagology.

Your own distinguished founder, Dr. Jo Ono, trained in the United States with Dr. Louis Clerf and in 1934 returned to Japan to introduce the specialty into this country. Doubtless many of you had the opportunity to study under Dr. Ono in former years.

In 1950, Dr. Tatsumo Uji, working with engineers in Japan, made the first gastrocamera. In 1955, the Japanese Endoscopic Society was founded and, as in the United States, developed a gastroenterologic orientation. The Society's contributions greatly encouraged interest in gastrointestinal endoscopy in the United States.

In 1958, Dr. Basil Hirschowitz began using a side-viewing fiberoptic gastroscope, which went into production in 1960. By 1966, there was sufficient interest to hold the First World Congress of Gastrointestinal Endoscopy in Tokyo, with 34 physicians from the United States attending.

The potential for these technologies to be applied to the smaller confines of the tracheobronchial tree was recognized in this country. In May 1969, Dr. Ikeda made the first of several visits to the Mayo Clinic in Rochester, Minnesota, and brought us our first bronchofiberscope. He also visited Johns Hopkins University and the National Cancer Institute. As a result, Dr. Bernard Marsh from Johns Hopkins visited Tokyo to study the use and application of this wonderful new instrument. Much fruitful exchange of students and scientific information has occurred between Japan and the United States in these past two decades, and there is exciting promise for future cooperation.

Again, I wish to express my deep appreciation to the members of this Society for the privilege of addressing you today.

DOMO ARIGATO GOZAIMASHITA