Presidential Symposium

“How have Japanese thoracic surgeons contributed to the world, and how could they, in the future?”

Olavo Ribeiro Rodrigues MD, PhD
Chief of Thoracic Surgery Department, University of Mogi das Cruzes, São Paulo-BRAZIL
23rd Annual Meeting of the Japanese Association for Chest Surgery (JACS)-25-27 May 2006

The past and present

Bronchoscopy—One of the main Japanese contributions to the thoracic surgery and to the world was the flexible bronchoscopy by S. Ikeda in July 1966 which made possible lung cancer early diagnosis. The examinations became easier, without the discomfort and the suffering caused by the rigid bronchoscope. R. Ono in the National Cancer Center of Tokyo began the bronchoscopic laser resections in the treatment of non-invasive bronchogenic cancer. Ono and Ikeda significantly contributed to divulging the bronchoscopy technique and its teaching.

General Thoracic Surgery and Oncology—K. Suemasu’s and T. Naruke’s studies on the systematic lymph node dissection for staging and treatment of lung cancer provided the definition of the first lymph node map in order to determine the guidelines of the lung cancer staging criteria. Nowadays the Japanese definitions for mediastinum lymph node dissection are accepted by most of the thoracic surgery centers worldwide.

Video Assisted Thoracic Surgery (VATS)—Japan’s advances of VATS resulted from the development of new imaging equipment, the joint efforts between Japanese surgeons and the surgical instruments industry developing new devices for VATS, the increase of early stage lung cancer cases, the hunt for the work market by the younger thoracic surgeons and also due to the rejection to the wide open thoracotomies, legacy of the Dutch medical schools in Japan.

Cardiac Surgery Area—I. Wada, in 1968, made the first heart transplant in Japan and contributed to the installation of heart surgery programs in many countries of Asia. Due to the lack of a specific legislation about organ transplants and organ donors, Japan could not develop the cardiac transplant at that time, however, the surgeon H. Suma, in Kanagawa, has been performing and perfecting the techniques employed in the Batista operation in cases of dilated cardiomyopathy as well as bridge to the heart transplants.

Suggestions to the future.

Lung cancer—Randomized studies are necessary in Japan centers to conclude the role of radical systematic mediastinal dissection in the survival of operated patients as well as the advantages of radical lymphadenectomy in the survival of patients. Results of studies made in other countries are not comparable to Japanese results, mainly by operator technique, by ethnic factors and due to the differences of lung cancer biology. In addition the groups of evidence based medicine doubt the advantages of the systematic lymphadenectomy in the patient’s survival.

VATS—Japanese Surgeons should teach short training courses of VATS to surgeons outside Japan in partnership with universities from Japan and other countries. Another option would be establishing this partnership among the international thoracic societies.

Trauma—Japan nowadays hosts a large number of immigrants from which 290,000 are from Brazil alone. The difficulty to social reintegration of these people to their countries it’s real and become more difficult every day. Changes in economy could result in unemployment and raise of criminality and even terror. The Japanese thoracic surgeons are partially ready to provide medical assistance in cases of trauma victims, resulted from this probable social conflict. Young thoracic surgeons would participate in trauma training centers according to the ATLS* guidelines outside Japan.

Transplants—Important cardiac transplants centers in the USA, Germany, Spain, Brazil and Colombia could accept young Japanese surgeons for staging in this matter. In the future, with the possibility of creation of cloned organs or organ generated by genetic engineering, the transplant programs in Japan may arise. Recently, we demonstrated that it is possible to transport a young patient from Japan and undergo a successful cardiac transplant in Brazil.

As a counterpart For the purpose of mutual benefit, we suggest that the Japanese medical community provide equipment and medical supplies to foreign public hospitals and Universities, by means of medical associations and or government institutions as well as devise the exchange of short term training programs between and most South American medical centers.

* Advanced Trauma Life Support