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The Unitarian Service Committee Medical Mission

Contribution by the United States to Post–World War II Japanese Anesthesiology

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IN Japan, as in many countries at the end of World War II, there was no organized anesthesiology service until the University of Tokyo founded its independent Department of Anesthesiology in 1952. Before then, the administration of anesthesia had been largely relegated to junior surgeons. A little-known program of the Unitarian Service Committee Medical Mission fostered the development of modern anesthesiology in Japan. The impact of the program on Japanese medicine, particularly anesthesiology, has been notable and is the subject of this article.

The Unitarian Service Committee Medical Missions

The Unitarian Service Committee was established in 1940 as a standing committee of the American Unitarian Association, a nonsectarian, voluntary agency whose purpose was to promote human welfare and social justice through service. The impact of the Unitarian Service Committee on medical education and practice was significant. From 1945 to 1956, it organized teams of specialists and sent them to teach the latest developments in American medicine in countries such as Austria, Columbia, Czechoslovakia, Finland, Germany, Greece, Italy, the Philippines, and Poland.[1] In 1950, the Unitarian Service Committee sponsored medical missions in Tokyo and Osaka–Kyoto. The missions resulted in establishing and developing anesthesiology, a new medical specialty in Japan.

Japanese Anesthesiology in 1950

At the time of the first Unitarian Service Committee Medical Mission in 1950, there was not a single physician trained in anesthesiology in all of Japan, nor was there a department or division of anesthesiology at any university hospital. Individuals learned anesthesiology by trial and error, often with senior surgeons, who were not trained in anesthesiology, giving suggestions if needed. Essential anesthetic equipment was scarce or even absent. Even at the University of Tokyo, the most prestigious university in the nation, the only anesthesia machine available in the operating room was a German Roth-Dräger machine (Lubeck, Germany) made in 1912. The machine, however, was used in less than 10% of cases. Wherever possible, surgeons used local anesthetics, which they considered to be the safest method. Some patients died of local anesthetic toxicity. However, toxicity was not recognized as a side effect of the agent.[2] Speed of surgery seemed to be a matter of pride. Many medical schools lacked any anesthetic equipment or used apparatuses that were crude and inefficient. Lack of communications between Japanese physicians and American anesthesiologists at the US military hospitals in Japan kept Japanese physicians from learning about the postwar development of American anesthesiology (written communication, Mitsugu Fujimori, M.D., Professor Emeritus of Anesthesiology, Osaka City University, Osaka, Japan, February 2004).

Earlier in the postwar occupation, experts recognized the great gulf in medical knowledge and technology, especially in new specialties such as anesthesiology and neurosurgery. Isolated from the rest of the scientific world since 1939, Japanese medical libraries lacked up-to-date scientific texts and medical literature. Because regulations prohibited Japanese currency as a medium of foreign exchange, even subscriptions to foreign medial journals and publications were not possible.[3] Paul Schafer, M.D. (Professor and Chairman, Department of Surgery, University of Kansas, Lawrence, Kansas; 1920–1991), one of the Unitarian Service Committee mission members, noticed that some deficiencies in Japanese medicine were in part due to the lack of contemporary literature from foreign countries. He did not think Japanese medical libraries would be supplied with up-to-date periodicals and textbooks, and he sent letters to 50 surgeons in the United States, England, and Scandinavian countries asking for help.[4] Modern anesthesiology was one of the subjects for which he requested reprints. Thirty-five volumes of the bound reprints were distributed to academic surgical departments throughout Japan.[5]

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Fig. 1. Dr. Meyer Saklad. Photograph courtesy of the Wood Library–Museum of Anesthesiology.

Unitarian Service Committee Medical Mission in 1950

Brigadier General Crawford Sams, M.D. (Chief, Public Health and Welfare with the Supreme Commander for the Allied Powers (SCAP),† Tokyo, Japan; 1902–1994), recognized the defects in medical education. Sams, a physician himself, was a native of East St. Louis, Illinois, and a 1929 graduate of Washington University School of Medicine. He headed the Public Health and Welfare Section of SCAP from October 1945 to July 1951. He became concerned about the quality and methods of instruction and also the lack of structured postgraduate education. In 1950, General Sams requested that the Unitarian Service Committee send a team of medical specialists to Japan for the rehabilitation of medical education.[6]

The Unitarian Service Committee was charged with organizing two medical meetings: one to be held in Tokyo and the other to be held in the Osaka–Kyoto area. The mission consisted of 12 physicians headed by Cecil Norman Hugh Long, M.D. (Dean, Yale University School of Medicine, New Haven, Connecticut; 1901–1970). Experts in biochemistry, pharmacology, bacteriology, physiology, internal medicine, surgery, pathology, radiology, anesthesiology, and pediatrics accompanied him. Meyer Saklad, M.D. (Director, Department of Anesthesiology, Rhode Island Hospital, Providence, Rhode Island; 1901–1979), represented anesthesiology (fig. 1). At considerable sacrifice, all participants gave up summer vacations to participate in the program. They received no honoraria or compensation of any kind. They did so because they believed that their efforts might help to strengthen personal and professional relationships between two countries.[7]

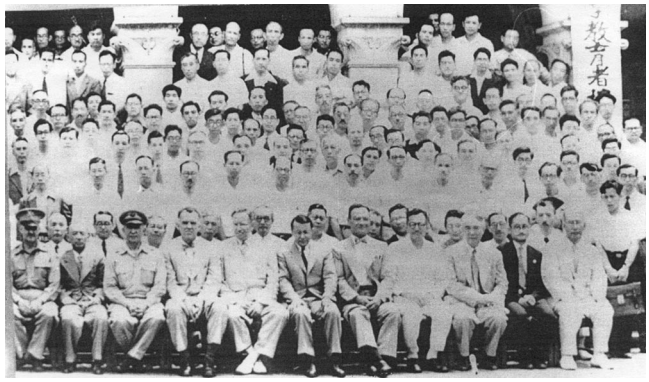

Fig. 2. The first Unitarian Service Committee Medical Mission in 1950. Dr. Saklad is the fifth from the right in the front row. Photograph courtesy of Dr. Ken-ichi Iwatsuki.

The impact of this mission on anesthesiology was anticipated well before the team departed. Dorothy Snavely (Assistant Director, Unitarian Service Committee, New York, New York; 1910–1992) wrote, "Anesthesiology in Japan as a specialty is completely unknown, and modern anesthesiology as we know in the United States, is practically unknown and we have been informed that there is not a single modern anesthetic apparatus." She went on to write, "Without a doubt the work of Dr. Saklad will probably be the most spectacular of any of our group of twelve members."[8]

The meetings, called the Institute on Medical Education for Japan,‡ were delayed several days by the outbreak of the war in Korea. They did commence, however, on July 24 and continued until August 11.[9] Two hundred twenty professors from 22 medical schools in the eastern part of Japan attended. Thirty-four participants attended Saklad's anesthesia lectures.

When General Sams first proposed the medical missions, many Japanese professors were doubtful about their value and what they would learn from the mission members. Once the sessions started, however, they became enthusiastic, impressed individually and collectively by the willingness of American physicians to help with the reorganization of medical education in Japan (fig. 2). The Japanese were especially impressed with demonstrations of American teaching methods, such as the joint sessions between anesthesiology and physiology, surgery, pediatrics and pharmacology, for example. Interdisciplinary cooperative sessions helped the Japanese with limitations of their own rigid departmental and caste system, a problem for many years.[7] Dr. Saklad presented premedication, inhalation anesthesia, breathing systems— open drop anesthesia, insufflation, to-and-fro method, semiclosed and closed circuit methods, pharmacology of anesthetic agents, tracheal intubation, spinal anesthesia, anesthesia for thoracic surgery, patient

† Title for Douglas MacArthur during the occupation of Japan after World War II.

‡ The meetings were called the "Joint Japanese-American Conference on Medical Education" among Japanese physicians, not "Institutes on Medical Education for Japan." The Japanese were extremely sensitive to the "exchange of information" idea, and the title made it seem to be a cooperative program and helped to make the program a success.

positioning during anesthesia, as well as some anesthesia-related topics, such as paradoxical respiration, shock, hypoxia, oxygen therapy, and education of anesthesiologists in the United States. He also had several joint sessions with a pharmacologist, a physiologist, and a surgeon.

After the conclusion of the Tokyo Institute, the American professors went to Osaka and Kyoto, where they conducted similar sessions from August 14 to September 6. Two hundred forty professors from 24 western Japanese medical schools attended the Osaka–Kyoto Institute.

Another contribution of the medical mission was that many books were donated to several medical schools. In her letter to publishing companies, Dorothy Snaverly wrote, "Japanese professors' salaries hardly cover their own living expenses and the personal possession of medical textbooks was a luxury."[10] Many companies responded to her request and donated books. Among noted anesthesiology textbooks were Leigh and Belton's *Pediatric Anesthesia* (Macmillan Co., New York, New York), Adriani's *Pharmacology of Anesthetic Drugs*, (Charles C. Thomas, Springfield, Illinois), *Chemistry of Anesthesia* (Charles C. Thomas), *Techniques and Procedures of Anesthesia* (Charles C. Thomas), Guedel's *Inhalation Anesthesia* (Macmillan Co.), and Cullen's *Anesthesia in General Practice* (Year Book Publisher, Chicago, Illinois).

If the hospitality extended to the visiting professors by the Japanese was an indication of their appreciation, the mission was an astonishing success. Host universities and government officials entertained often. However, the medical mission did not receive extensive news coverage.

General Douglas McArthur (Supreme Commander for the Allied Powers, Tokyo, Japan; 1880–1964) received a report of the mission in December 1950. In an accompanying letter, Howard L. Brooks (Associate Director, Medical Project, Unitarian Service Committee, New York, New York) wrote that the Unitarian Service Committee undertook the program hoping that some constructive contribution could be made.[11] For reasons still not clear, General Sams was not satisfied with the report and did not give a copy to the Japanese. Some Japanese thought that the report had been delayed and that something had been hidden from them. They did not receive a copy until September 1951, after Sams left to become Assistant Commandant, Medical Field Service School in Texas.[12]

The Second Unitarian Service Committee Medical Mission in 1951

Soon after the first mission left Japan in September 1950, General Sams suggested the possibility of a second mission returning to Japan in 1951. He wrote to a Unitarian Service Committee executive that if the program were conducted while the medical schools were in session, American professors would be able to observe Japanese teaching methods and provide on-the-spot advice and assistance to the Japanese professors. He also suggested that the mission should visit various schools to evaluate the impact of the first mission. In November 1950, General Sams officially requested that the Unitarian Service Committee send another mission in 1951, composed of four teams of three members, each to consist of two clinicians and one basic scientist. He suggested that each team spend 2 weeks in each of the schools it visited, which would give complete coverage to each of 46 medical schools.[13]

Fig. 3. Dr. Perry Volpitto. Photograph courtesy of the Wood Library–Museum of Anesthesiology.

General Sams wrote to Dr. Saklad on February 13, 1951: "The interest aroused in the subject of anesthesiology through your efficient presentations has continued to be evident. I feel that it is a field to be covered by the follow-up group and sincerely hope you will be able to return with the mission being organized for this year."[14] It is not clear why Dr. Saklad did not accept an invitation from General Sams. Perry Volpitto, M.D. (Professor and Chairman, Department of Anesthesiology Medical College of Georgia, Augusta, Georgia; 1905–1988), served in his place (fig. 3).

The second mission began in Tokyo on May 14, 1951. In contrast to the previous mission, the four teams visited 12 medical schools from one end of the country to the other and made contact with more than 7,000 teachers and students. Whereas the first mission had devoted its time to lectures in each specialty, the 1951 mission had objective lectures, round table and panel discussions, and demonstrations before physicians and as many students as could be reached.[15]

Paul Beeson, M.D. (Professor and Chairman, Department of Medicine, Emory University, Atlanta, Georgia; 1908–), served as chairman of the mission. He submitted

the 1951 Unitarian Service Committee's Medical Mission report to General Matthew Ridgway (Supreme Commander for the Allied Powers, Tokyo, Japan; 1895–1993) on October 2, 1951.[16] Comments in the report written by Dr. Volpitto illustrate the situation that they encountered:

> Dr. Saklad's visit last year stimulated thought. All the schools seemed to be desirous of getting a broader scope of anesthesia. Some of them have sent physicians for training in anesthesiology in the United States. However, in none of the universities visited is there any teaching in subjects pertaining to anesthesiology, and no action has been taken as yet. Anesthesiology is practically nonexistent except in a primitive manner. Learning anesthesiology seems to be on a trial-and error basis, with the surgeon giving a few suggestions if needed to the individual doing anesthesia for the particular case. Basically this is due to the following factors; 1) anesthesiologists are not available for training, 2) there is not a specific training of assignment of personnel, 3) there is lack or complete absence, of anesthetic equipment; available apparatuses are very crude, inefficient and expensive.

He continued,

> There seems to be little if any attempt to prepare the patient for anesthesia. Whenever possible, anesthesia is limited to local infiltration with procaine. Spinal anesthesia is usually employed for major surgery below the diaphragm, for adults as well as children. Supplementary agents are rarely used in the event the anesthetic wears off or is inadequate. General anesthesia is employed; it is estimated, in less than 10% of the cases. One institution visited employs it in less than 1% of the patients. Ether is the main agent although chloroform is sometimes employed. The open technique is generally used. In the past few months, anesthetic apparatus were purchased by some of the schools. The apparatus is employed primarily for endotracheal anesthesia in intrapleural surgery, the endotracheal tube usually being put into place under topical anesthesia with cocaine in the conscious patient. Epidural anesthesia being attempted in some of the institutions visited. Only a few cases have been done.

Clearly, even at the completion of the second mission, it was a fact, and evident to Japanese physicians, that much work remained to be done. For example, even before the mission left Japan, Yoshio Kusama, M.D.§ (Professor, Department of Public Health Keio University, Tokyo, Japan; 1888–1968), a Stanford University School of Medicine graduate and then the head of the Council on Medical Education, wrote to Colonel Mollohan (Deputy Chief, Public Health and Welfare, SCAP, Tokyo, Japan) requesting a third mission. In his response, Colonel Mollohan assured the Unitarian Service Committee that he would give it his consideration if there were funds. Shortly thereafter, however, Colonel Mollohan informed the Unitarian Service Committee in January 1952 that the Government Account for Relief in Occupied Areas‖ funds had been closed, and that it would not be possible for SCAP to finance another program. With the ratification of the Japan's Peace Treaty with the Allied Powers in September 1951, Colonel Mollohan's decision was not unexpected. Despite this impediment, the 1951 mission was not the last Unitarian Service Committee medical mission to Japan.

The Third Unitarian Service Committee Medical Mission in 1956

The Unitarian Service Committee was again invited to send another medical mission to Japan in the spring of 1956. This mission differed from the other two in that it was initiated by Japanese physicians, who were professionally and personally connected to Cornell University. The 1956 mission was the best evidence of impact of previous missions and the warm personal relations that had been established between the American mission members and Japanese physicians. Koroku Hashimoto, M.D. (University of Tokyo, Tokyo, Japan; 1911–1990), on leave from the University of Tokyo, was at Cornell's pharmacology department. The chairman of the department was McKeen Cattell, Ph.D., M.D. (Professor and Chairman, Department of Pharmacology, Cornell University, New York, New York; 1891–1983), a 1950 mission member. Dr. Hashimoto suggested sending a medical team to Japan. He spoke to several physicians who later became mission members. He also spoke to a Unitarian Service Committee executive about the possibility of sponsoring the mission. He met with a warm and enthusiastic affirmative response. He thought such a program might prove very successful if developed around the central theme of anesthesiology. The reasons for his selection of anesthesiology were as follows: (1) He had studied in the Department of Pharmacology of Cornell University, a department that had a close tie with the Section of Anesthesiology; (2) Walter Riker, Jr., M.D. (Associate Professor, Department of Pharmacology Cornell University, New York, New York; 1916–2004), and Joseph Artusio, M.D. (Associate Professor, Department of Surgery [Anesthesiology], Cornell University, New York, New York; 1917–) (fig. 4), were not only scientific

§ General Sams called him the "Father of the new era of medical education in Japan."

‖ Funded through the US Army's military budget, the program provided for the civilian populations of formerly occupied areas the basic necessities, such as food, pharmaceuticals, and later academic scholarship.

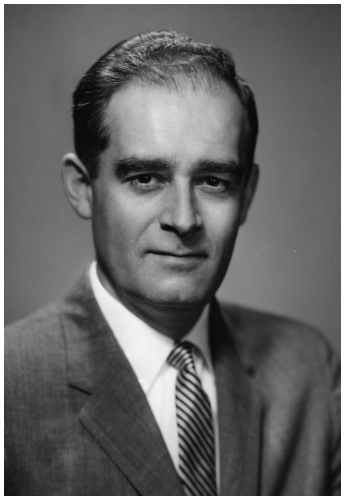

Fig. 4. Dr. Joseph Artusio. Photograph courtesy of the Wood Library–Museum of Anesthesiology.

collaborators, but close personal friends; (3) anesthesiology was most closely allied with the basic sciences; and (4) anesthesiology as a clinical specialty was just beginning to grow in Japan, and considerable benefit could therefore be provided for the anesthesiologists who would inevitably continue to be the leaders of the specialty in Japan. The approach would be a discussion of the basic sciences related to this new medical discipline, the integration of anesthesiology into medical teaching, and the clinical organization and utilization of scientific anesthesia methodology. The Unitarian Service Committee turned to the Rockefeller Foundation for a grant to underwrite the mission. Six mission members, including Dr. Artusio, physiologists, and pharmacologists, participated in conferences with Japanese medical leaders for 6 weeks in April and May 1956.

Unlike the two previous missions, presentations at the 1956 meeting were mainly research related, and the third mission members encouraged the Japanese physicians to present their own research. Many of the subjects discussed had been under investigation by both American and Japanese groups, and therefore, the Japanese were well prepared to participate— certainly a mark of the impact of the work of previous missions.

In his final report submitted to Wilmer Froistad (Associate Director, Unitarian Service Committee, Boston, Massachusetts) on March 13, 1957, Dr. Artusio wrote,[17]

> It is quite apparent that anesthesiology will develop, but it is also quite apparent that this development will be slow. The answer to the problem of development lies here not in more equipment, but in more personnel, more opportunities for training, and better training itself. Several nuclei of trained personnel already exist in centers, where teaching and research have already been developed. I feel that the influences of these small nuclei in various sections of Japan will change the situation. They are most anxious to hear about new methods and techniques, and they are beginning to do nice pieces of research on their own. I realize that the practice of anesthesiology as a specialty has a long way to go in Japan, and I think our symposium has given it a decided boost.

In a letter sent with his report to the Unitarian Service Committee, Dr. Artusio wrote to Wilmer Froistad[18]: "I agree that to send a medical team every other year would maintain the continuity and would further the work that the teams have begun in the various countries." Another member of the mission, Carlton Hunt, M.D. (Professor, Department of Physiology University of Michigan, Ann Arbor, Michigan; 1918–), also suggested a possible future mission to Japan. He wrote, "The Unitarian Service Committee might consider sending successive teams to alternate between clinical and preclinical subjects. One of the strong points of medical education in America is the generally close liaison between basic medical research and teaching, and clinical studies. I feel this should be emphasized by future teams to Japan."[19] Despite two members' suggestions, the 1956 Unitarian Service Committee's medical mission was the last organized medical mission sent to Japan.

Japanese Anesthesiology after the Unitarian Service Committee Medical Missions

The First Mission's Contribution to Japanese Anesthesiology

In his lectures and demonstrations, Dr. Saklad stressed that anesthesiology was both clinical physiology and pharmacology.[2] This impressed established academic surgeons and stimulated interest among younger physicians. Numerous professors of surgery began to press for establishment of university departments of anesthesiology. One of them was Kentaro Shimizu, M.D. (Professor, Department of Surgery, University of Tokyo, Tokyo, Japan; 1903–1987), who translated all of Dr. Saklad's lectures and was trained in neurosurgery at the University of Illinois before World War II (1940–1942). He also spent a year at the same university and came back a few weeks before the Unitarian Service Committee mission arrived in Japan. As a surgeon, he recognized the importance of trained anesthesiologists for the development of his own specialty. Later in 1950, he asked Hideo Yamamura, M.D. (Department of Surgery University of Tokyo, Tokyo, Japan; 1920–), his junior faculty member and an attendee of Dr. Saklad's lectures, to switch from surgery to anesthesiology. After 8 yr of training and practice of surgery, Dr. Yamamura was at first somewhat reluctant, but eventually he agreed to chair the nation's first independent anesthesiology department, established at the University of Tokyo in 1952 (verbal communication, Hideo Yamamura, M.D., Professor Emeritus

of Anesthesiology University of Tokyo, Tokyo, Japan, April 2003).

Wasaburo Maeda, M.D. (Professor, Department of Surgery Keio University, Tokyo, Japan; 1889–1979), hosted the Unitarian Service Committee anesthesiology conferences at his institution. Although one of his junior members at the department, Michinosuke Amano, M.D. (Department of Surgery Keio University, Tokyo, Japan; 1916–), started anesthesiology training at University of Chicago in the summer of 1950, Dr. Maeda was not necessarily interested in anesthesiology until he first met Dr. Saklad.[20] By early 1951, however, Dr. Maeda realized the importance of anesthesiology as an independent specialty. In his presidential address at the 1951 annual meeting of the Japanese Society of Surgeons, he mentioned the Unitarian Service Committee and Dr. Saklad's contribution to a new specialty and emphasized the extreme importance of anesthesia research and education for the future of Japanese medicine.[2] Both Drs. Maeda and Shimizu were founding board members of the Japanese Society of Anesthesiologists (JSA). Another surgeon was Masao Muto, M.D. (Professor, Department of Surgery Tohoku University, Sendai, Japan; 1898–1972), another participant of Dr. Saklad's lectures. He applied for establishing anesthesiology as an independent department at his school to the Ministry of Education soon after the Unitarian Service Committee mission left. Although the Ministry of Education received his application before Dr. Shimizu's, the anesthesiology department was established at Tohoku University in 1953, a year after the department was established at the University of Tokyo. Dr. Muto was also a founding board member of the JSA and served as the first president of the JSA.

Another contribution of Dr. Saklad to Japanese anesthesiology was to train Japanese physicians at his department. Trainees were referred from surgeons he met during the mission. Ken-ichi Iwatsuki, M.D. (Associate Professor, Department of Surgery Shinshu University, Matsumoto, Japan; 1913–), another attendee of Dr. Saklad's lectures, sent his junior faculty member, Shei-ichi Kiyono, M.D. (Department of Surgery Shinshu University, Matsumoto, Japan; 1926–1992), to Dr. Saklad's department for training. He later became the chairman of anesthesiology at Shinshu University. Kingo Shinoi, M.D. (Professor, Department of Surgery Tokyo Medical College, Tokyo, Japan; 1905–1966), the fifth president of the JSA, who attended the 1950 lectures and became a personal friend of Dr. Saklad, sent his junior members for training in the 1950s and 1960s. One of them, Tamotsu Miyake, M.D. (Department of Surgery Tokyo Medical College, Tokyo, Japan; 1924–1992), became the chairman of his alma mater and later served as the society's president.

In 1958, Dr. Saklad returned to Japan to attend the fifth annual meeting of the JSA as a guest speaker and honoree. He was presented with a certificate of appreciation for his contributions to Japanese anesthesiology. In the anesthesiology community in Japan, Dr. Saklad is now referred to as "the Matthew Calbraith Perry# (1794–1858) of Japanese anesthesiology."

The Second Mission's Contribution to Japanese Anesthesiology

Dr. Volpitto not only gave classroom lectures, but also demonstrated anesthetic management and operating room techniques, including cyclopropane anesthesia, continuous spinal anesthesia, and stellate ganglion blockade. No record shows how widely these were accepted after the meeting.

A prominent physician inspired by the medical mission who worked with Dr. Volpitto was Shichiro Ishikawa, M.D. (Associate Professor, Department of Surgery Keio University, Tokyo, Japan; 1910–1986), a thoracic surgeon at Keio University. He had been interested in anesthesiology since the mid-1940s and had published several anesthesiology-related articles in surgical journals. He successfully imported an American-made anesthesia machine in 1950, probably the first anesthesia machine imported after World War II.[20] He was also credited with introduction of the Macintosh laryngoscope, a piece of apparatus donated by Dr. Volpitto (oral communication, Michinosuke Amano, M.D., Professor Emeritus of Anesthesiology, Keio University, Tokyo, Japan, April 2003).

The mission members made many personal friends while they were in Japan. From this association evolved several fellowships for Japanese physicians. Charles Johnston, M.D. (Professor and Chairman, Department of Surgery Wayne State University, Detroit, Michigan; 1899–1975), a surgical representative, arranged an anesthesiology residency in his medical school for several Japanese physicians. Tetsuji Furukawa, M.D. (Department of Surgery, Kyushu University, Fukuoka, Japan; 1921–1993), was the first to complete anesthesiology residency there. Upon his return to Japan in 1955, he headed the anesthesiology division of Kyushu University. Jun-ichi Yoshitake, M.D. (Department of Surgery Kyushu University, Fukuoka, Japan; 1929–2003), and Kenjiro Dan, M.D. (Department of Surgery Kyushu University, Fukuoka, Japan; 1928–), followed Dr. Furukawa's lead, and they finished their anesthesiology training at Wayne State University. Dr. Yoshitake returned to his alma mater in 1961, and Dr. Dan returned in 1963. Dr. Furukawa established independent academic anesthesiology departments at Juntendo University and later Kyushu University. Dr. Yoshitake established the anesthesiology department at Kagoshima University (written

In 1854, Commodore Perry, an American naval officer, was sent on the mission to Japan to open its closed society to foreign countries. Perry's mission ended Japan's isolation from the outside world since the 17th century, a prerequisite for its subsequent development into a modern nation.

communication, Hideo Yamamura, M.D., Professor Emeritus of Anesthesiology, University of Tokyo, Tokyo, Japan, June 2003). Dr. Dan established an academic department at Fukuoka University in 1972. All of them served the JSA as president, Dr. Furukawa from 1967 to 1968, Dr. Yoshitake from 1983 to 1984, and Dr. Dan from 1991 to 1992 (oral communication, Kenjiro Dan, M.D., Professor Emeritus of Anesthesiology, Fukuoka University, Fukuoka, Japan, December 2005).

The Third Mission's Contribution to Japanese Anesthesiology

With regard to this mission, Yushi Uchimura, M.D. (Dean, Faculty of Medicine University of Tokyo, Tokyo, Japan; 1897–1980), sent a letter to Dana McLean Greeley (President, Unitarian Service Committee, Boston, Massachusetts; 1908–1986). In his letter on June 11, 1955, Dr. Uchimura wrote,[21]

> In 1950 and 1951 we were highly honored by the visit to this country of the Unitarian Service Committee Medical Mission to Japan. On each occasion the mission left a deep impression on us members of the Japanese medical profession. For us these contacts reaped immeasurable benefit for which we are deeply appreciative. Since then Japanese medicine has shown remarkable advancement, but unfortunately there is yet one branch, which lags behind somewhat and is desperately in need of revitalization. This is the field of Anesthesiology.

Although Dr. Uchimura's comment was true, the 1956 mission did not receive the attention or have the same impact as the previous two missions on Japanese anesthesiology. By 1956, anesthesiology was accepted as an independent clinical specialty and started growing. Five Japanese medical schools had independent academic anesthesiology departments (Tokyo, Kyoto, Tohoku, Keio, and Sapporo). Four of these departments were headed by an American-trained anesthesiologist, Tokyo and Sapporo by Dr. Hideo Yamamura (trained at Albany Medical College) and Takao Takahashi, M.D. (Professor, Department of Anesthesiology Sapporo Medical College, Sapporo, Japan; 1922–) (trained at New York University–Bellevue Hospital), respectively. Both were 1950 Unitarian Service Committee participants. The department at Keio was headed by Dr. Michinosuke Amano, a 1950 "Government Account for Relief in Occupied Area" scholar (trained at the University of Chicago).[20] In 1958, Dr. Ken-ichi Iwatsuki (trained at Boston City Hospital), who also attended Dr. Saklad's lectures in 1950, became the first professor of the department at Tohoku. The academic anesthesiology started growing as a clinical department. Anesthesiology divisions at almost all medical schools visited by the mission were headed by an anesthesiologist trained in the United States, and each was well advanced to become an independent department. However, anesthesiology research was still in the infant stage at most of the universities. The 1956 mission gets credit for stimulating research, which later attained remarkable levels as witnessed by the growing scientific publications originating from these academic institutions.[22]

The JSA was founded in 1954. All of the six founding members of the society were surgeons. All of them attended the 1950 Unitarian Service Committee's anesthesiology meeting. Five of them served as president of the society from 1954 to 1958. Dr. Yamamura became the sixth president; the first full-time anesthesiologist served as president. When the first annual meeting was held, Dr. Yamamura, the only anesthesiologist who attended all three Unitarian Service Committee missions, and Dr. Amano, the only two US–trained anesthesiologists in the nation, single-handedly ran the society as the board members in its formative years.[21] An anesthesiology journal was first published in 1952 by five surgeons. Two of them attended Dr. Saklad's lectures. The journal became the semiofficial journal of the society in 1954 when the JSA was founded. One of the founding editors remained as the editor, but other surgeon–editors were replaced by full-time anesthesiologists. Dr. Yamamura was one of them (written communication, Hideo Yamamura, M.D., Professor Emeritus of Anesthesiology, University of Tokyo, Tokyo, Japan, June 2006).

Despite the founding of the JSA and the publication of the society's semiofficial journal, it was not until 1960 that anesthesiology was officially recognized as an independent practice of medicine. Anesthesiologists have never been allowed to directly bill the social health insurance system for their services and have not become independent private practitioners. This obstacle has since created a chronic workforce shortage.[22]

Conclusion

The Unitarian Service Committee Medical Missions programs in 1950 and 1951 retrospectively helped an orderly transition to an American-style medical system. Regardless of its intended purposes, the medical missions were a great success. The direct beneficiaries of the Unitarian Service Committee's missions were not many.

However, the impact of the programs on Japanese medicine, especially anesthesiology, was immense and long lasting. It would be an overstatement to suggest a direct cause-and-effect relation between the work of the missions and the subsequent development of anesthesiology in Japan. Certainly, Japanese medical education was poised for change at the end of World War II after several years of relative isolation. On the other hand, it would seem fair to suggest that the three missions stimulated development and shaped it through lectures, demonstrations, and the exchange of people and ideas.

In the past 30 yr, Japanese anesthesiologists, especially those at academic departments, have been encouraged to pursue research. Unlike physicians in the 1950 and 1960s who pursued clinical anesthesiology training in the United States, many young Japanese anesthesiologists traveled to further their research career at many research institutions in the United States. In the past 5 yr, Japanese anesthesiologists presented more than 300 papers at the annual meetings of the American Society of Anesthesiologists. Although it is difficult to pinpoint the direct impact of American anesthesiology, beginning from Unitarian Service Committee medical missions in the 1950s, on present-day Japanese anesthesiology, evidence suggests that American anesthesiology stimulated and shaped the development of modern anesthesiology in Japan.

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