

## PART ONE HISTORY

**Hand Surgery Worldwide:** International Reconstruction of a "Beautiful and Ready Instrument of the Mind"

# Philippines

**32**  
**CHAPTER**



**Founded 1985**

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Hand surgery in the Philippines began with two premier orthopedic institutions: The National Orthopedic Hospital (now the Philippine Orthopedic Center) and the University of the Philippines - Philippine General Hospital, Department of Orthopedics. The National Orthopedic Hospital evolved during the aftermath of World War II in 1945 as an Emergency Hospital-The Civilian Aid Unit I, organized by a Filipino Surgeon-Colonel under the USAFFE Medical Corps. After the post-war emergency period, the emergency hospital was renamed in 1947 as the "National Orthopedic Hospital" under the Bureau of Health with Dr. JV delos Santos as the first Chief of Hospital. In 1956, the Hand and Peripheral Nerve Surgery Unit was established at the National Orthopedic Hospital with Dr. Buenaventura Canto as head and Dr. Eugenio Inocentes as the senior resident. Three years later, through the efforts



of Dr. Canto and Dr. Benjamin Tamesis, Dr. Inocentes was sent to the United Kingdom and India from 1959 to 1960 under the British Colombo Plan Fellowship Grant. Dr. Inocentes rotated under Dr. RG Pulvertaft, Prof. HJ Seddon and Dr. D Brooks in England, Prof. JP James in Scotland, and Prof. PW Brand in India. After his return to the Philippines in 1960, Dr. Inocentes headed the Hand and Peripheral Surgery Unit and continued as a lecturer in Hand Surgery until 1999. At present, the Philippine Orthopedic Center has four consultant hand surgeons working in the Section of Hand Surgery. The Philippine Orthopedic Center is presently the largest center dedicated to orthopedics and is accredited by the Philippine Board of Orthopedics as an orthopedic training institution.

The University of the Philippines College of Medicine-Philippine General Hospital (PGH) was established in 1908. In 1952, the Section of Orthopedics under Dr. Ambrosio Tangco was established under the Department of Surgery. A promising surgeon Dr. Jose V. Silao, Jr. was sent by Dr. Tangco for hand surgery training in the USA under Dr. R Carroll and under Dr. W Green from 1970-71. In June 1971, the Section of Orthopedics became a separate Department, with Dr. Jose V. Silao, Jr. as first Department Chairman. Dr. Silao saw the need for advanced training in the different areas of orthopedics. Graduates of the department were sent overseas for advanced training in the orthopaedic subspecialties of adult, trauma, spine, pediatric, and hand. From the late 1970's to the early 1980's, the different sections of orthopedics were formed. This included the Section of Hand Surgery. In 2002, the Section of Hand Surgery established the Microsurgery Service and in 2005, the Microsurgery Service was renamed the Microsurgery Unit—a multidisciplinary unit dedicated to microsurgical reconstruction needs of patients.

## Hand Training in the Philippines

Training in hand surgery in the Philippines is part of the comprehensive residency training program in Orthopedic surgery, certified by the Philippine Board of Orthopedics (PBO). All accredited orthopedic training institutions are required to have their resident or trainee accomplish at least 3 months of clinical training in hand surgery. Orthopedics residency training programs in the Philippines follow a general curriculum issued by the PBO that involves clinical rotations in orthopedic trauma, adult reconstruction, spine, pediatrics, and hand surgery in one accredited hospital during a four year period. Specific learning objectives, length and order of rotation are individualized by each training institution /hospital. At the end of residency training, surgeons are expected to be proficient in managing common hand conditions. Certification of each training program is granted based on the number of Orthopedic cases seen by each institution and the available facilities for managing Orthopedic patients – number of dedicated beds, clinic hours, operating theater equipment, presence of support services such as rehabilitation, prosthetics/orthotics and pathology services. Presently, the Section of Hand and Microsurgery of the PGH has six consultant faculty members supervising resident training and management of service cases.

The Section of Hand Surgery of the Department of Orthopedics, Philippine General Hospital is the only institution in the country that offers a clinical fellowship program in hand surgery which was instituted in 1995. This one-year fellowship program is recognized by the Philippine Society for Surgery of the Hand (PSSH) and the umbrella organization in orthopedics—the Philippine Orthopedic Association. Fellows are exposed to the management of all hand patients for the year and are responsible for taking care of



hand patients of the section. All fellows are required to do basic microvascular anastomosis in a rat model as part of their training. They are also required to complete at least one research paper prior to graduation. Aside from managing hand trauma, fellows are also exposed to a variety of microsurgical procedures such as replantation surgery, free tissue flaps for soft tissue coverage, vascularized long bone reconstruction for post traumatic injuries and post-oncologic resections, vascularized joint reconstruction for avascular necrosis of the femoral head and the microsurgical management of obstetric and traumatic brachial plexus injuries. Fellows are also encouraged to take advantage of using the animal laboratory of the Microsurgery Unit to do nerve and vascular repairs in animal models. At present, the fellowship program has graduated five hand specialists. There are no local certifying bodies for Hand Fellowship training in the Philippines as of this writing. Hand surgery in the Philippines is mainly done by orthopedic surgeons with a minority being done by general and plastic surgeons with additional training in hand surgery.

### **Philippine Society for Surgery of the Hand**

The Philippine Society for Surgery of the Hand was conceptualized to address the needs of the Filipino people for specialized care of the hand. The group was initially formed in 1984 through the initiatives two prominent hand surgeons: Dr. Vicente Pido and Dr. Eugenio Innocentes, Jr. The society had seven founding members with Dr. Vicente Pido as president and Dr. Eugenio Innocentes, Jr. as vice-president. A year later, the society constitution and by-laws were drafted and approved by its members.

Today, the society has expanded its membership to 28 hand surgeons from Orthopedic, Gen-

eral and Plastic Surgery. Since then, the society has conducted various workshops and lectures around the country. Hand surgeons from around the world have helped the society achieve this. Among them were Dr. Tan Ser Kiat (Singapore), Dr. Bruce Conolly (Australia), Dr. John Wyrick and Dr. John Capo (USA), Dr. Yoshikazu Ikuta (Japan), Dr. Teoh Lam Chuan (Singapore), Dr. Looi Kok Poh (Singapore), Dr. PC Ho and SP Chow (Hong Kong).

Among the projects of the PSSH aside from holding regular meetings are quarterly round table discussions of hand cases among the different institutions across the country. In this way, we are able to promote the specialty and the local hand surgeons in the area. One of the goals of the society is to spread hand surgery across the nation so that more Filipinos will have access to specialized hand care. Past presidents of the society include: Dr. Vicente Pido, Dr. Eugenio Innocentes, Jr., Dr. Leo Daniel Caro, Dr. Ida Tacata, Dr. Ferdinand Autea, and the current president of the society, Dr. Angel Gozum.

### **Pioneers of Hand Surgery in the Philippines**

In any great feat or achievement, there will always be people behind the action that is responsible for initiating, achieving or sustaining those achievements. Hand surgery in the Philippines today would not be possible if not for certain key personalities that have dedicated their lives in developing and promoting the specialty of hand surgery. Among the early proponents of the specialty, Dr. Eugenio Innocentes, Jr. would probably stand out as the "Father of Hand Surgery" in the Philippines. In the 1950's and 1960's, hand surgery as a specialty was not well recognized, and most surgeries of the hand were being done by general orthopedists and general surgeons. Dr. Innocentes went out

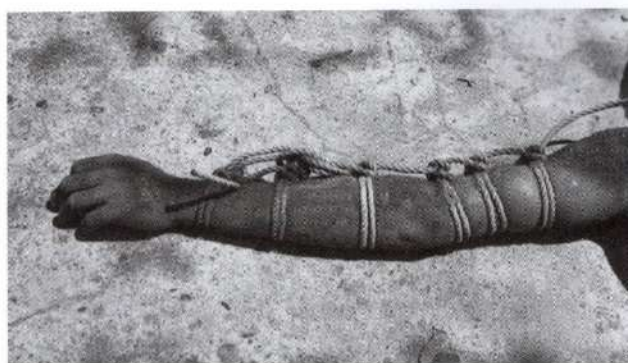




**FIG. 1** Here, devout Catholics are lined up and flagellate themselves during Good Friday.

of his way to acquire specialized training in hand surgery and subsequently established and headed the Hand and Peripheral Nerve Unit of the Philippine Orthopedic Center (then called the National Orthopedic Hospital). His interest in tendon transfers for the paralytic hand placed him in the forefront of reconstructive hand surgery in the Philippines. His published articles on tendon transfers were the first in the Philippines. The contributions of Dr. Inocentes on hand surgery has blossomed today where four hand specialists from the Philippine Orthopedic Center, the institution where he first started, are continuing his work on specialized care and reconstruction for the hand.

At University of the Philippines-Philippine General Hospital, Dr. Ambrosio Tangco saw the need for specialized hand surgery training and initiated the training of Dr. Jose V. Silao, Jr. to study hand surgery overseas in 1970. Upon his return, Dr. Jose V. Silao became the founding chairman of the Department of Orthopedics of the University-based hospital. Following the vision of Dr. Ambrosio Tangco for specialized training in the hand and with the other subspecialties as well, Dr. Silao initiated the overseas training of the graduates of the Department of Orthopedics.



**FIG. 2** The hands of the devout Catholic is usually tied during the cenaculo, the most revered religious celebration in The Philippines.



**FIG. 3** The hands of the devout in prayer.



**FIG. 4** The hand of a devout Catholic nailed to the cross.

Among the early recipients of specialized training in the hand at that time were Dr. Ida Tacata (San Francisco, USA under Dr. Eugene Kilgore) and Dr. Severino Tanbonliong (University of Tokyo, Japan under Dr. Yamauchi). Dr. Silao's influence on atraumatic handling of hand injuries has





**FIG. 5** The logo of the Philippine Society for Surgery of the Hand. The colors of the Philippine flag are behind the healing hand of the society symbolizing the devotion of the society members to management of various hand problems of the Filipino people.

been continued since he became the head of the Department of Orthopedics three decades ago. His devotion to hand surgery as a specialty gave birth to the Microsurgery Unit in 2005. The multi-disciplinary unit is the only one of its kind in the Philippines (alongside with the Brachial Plexus Clinic). As a tertiary hospital and a University-based hospital, the Microsurgery Unit has been the referral center for various microsurgical reconstructive surgeries. The Brachial Plexus Clinic under the Microsurgery Unit has been in the forefront in the management of obstetric and traumatic brachial plexus injuries in the Philippines. At present, the Microsurgery Unit is being headed by Dr. Emmanuel P. Estrella.

Another leader in hand surgery, especially with the "Philippine Society for Surgery of the Hand" is Dr. Vicente Pido. Dr. Pido was very instrumental in the creation of the present hand society in 1984 and served as its founding president. Together with Dr. Inocentes as its founding vice-president and distinguished members such as Dr., Luisito Maano, Rimando Saguin, Felix Vicuna, and Con-



**FIG. 6 & 7** The Philippines is known for its wonderful beach resorts, like this one in Bohol, Philippines.

rado de Gracia, the Philippine Society for Surgery of the Hand created its by-laws and constitution in 1985.

## Figures and Legends

The Cenáculo (Spanish, pronounced: [thay-nah'-coo-lo]) is actually the dining hall according to Christian doctrines where Jesus Christ celebrated the Last Supper. In the Philippines, cenaculo is synonymous to the "Passion Play" and is celebrated during the Holy Week-the most revered religious celebration in the country. In the "Cenaculo", the devout Catholic usually flagellates himself as sign of gratitude for answered prayers or as penance for their sins (*Figs. 1-3*). This is a form of reenactment of the

sufferings of Jesus Christ. Some devout Catholics go as far as having themselves nailed to the cross (*Fig. 4*).

### Acknowledgments

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