Giants of Orthopaedic Surgery

Giants of Orthopaedic Surgery: Carlos E. Ottolenghi MD (1904–1984)

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Many notable and talented orthopaedic surgeons have devoted their lives to improving patient care, education, and research at the world renowned Italian Hospital of Buenos Aires. [2]. One orthopaedic surgeon emerged as both exemplary and extraordinary. Today, the Institute of Orthopaedics at the Italian Hospital of Buenos Aires even bears his name: Carlos E. Ottolenghi MD (Fig. 1).

“It has often been said that institutions survive the men who created

them,” Prof. D. Luis Muscolo MD, professor at the Institute of Orthopaedics “Carlos E. Ottolenghi” Italian Hospital of Buenos Aires and one of Dr. Ottolenghi’s former students, wrote via email. “The fact that we [not long ago celebrated] the 150th anniversary of the Italian Hospital, named for the immigrants who built it, remembering one of its most remarkable physicians, long gone, seems to confirm that. But in truth, the very nature and destiny of institutions is

determined by men. Dr. Ottolenghi’s noble and generous example is his best legacy to the Hospital Italiano de Buenos Aires.”

Dr. Ottolenghi’s principled and distinguished career is even more impressive when one considers the turbulent era in which he made his mark. Argentina, most notably its capital, Buenos Aires, was marred by war, economic instability, juntas, and several military coups d’état [1]. The country’s socio-economic volatility was likely a major contributor to the deterioration of public healthcare for the less fortunate. It is within this shifting state of socio-economic and political upheaval we find the man who managed to remain chief of service at the Italian Hospital of Buenos Aires from 1944 to 1975 [4].

When asked to describe their colleague, Dr. Ottolenghi’s peers often look beyond his prodigious professional accomplishments. Prof. Muscolo recalled the ceremony to mark Dr. Ottolenghi’s departure as a full-time professor to emeritus professor. According to Prof. Muscolo, Dr. Leoncio L. Fernandez, a renowned orthopaedist, searched for the correct word to summarize the root of Dr. Ottolenghi’s success, the source of his prestige, and the basis of his colleagues’ admiration. Dr. Fernandez was looking

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for the one word that could define Dr. Ottolenghi. According to Prof. Muscolo, Dr. Fernandez came up with the quintessential word: “Fair”. It was, by all accounts, the perfect description. According to Muscolo, Dr. Ottolenghi was known as always being fair in his behavior, fair in his decision making, and fair in his opinions.

Being fair and achieving fairness along with excellence, may seem like disparate goals. Dr. Ottolenghi stayed true to promoting the best of orthopaedic surgical care, education, and research. Recognizing patient autonomy and respect for the individual, he occasionally employed massive allografts to reconstruct large defects in patients “who would not accept an amputation or disarticulation.” [12]. He stated that this approach was justified and not “experimental human surgery” in such exceptional circumstances [12]. He focused on objective criteria for surgical procedures, evaluation based outcomes, educational curricula, and goal oriented research before these concepts were described as such. Prof. Muscolo noted, “And never, not even in the most difficult and delicate situations, have his decisions and conduct been anything less than noble. And even under the most difficult and delicate conditions, his decisions and behavior reflected the utmost nobility.”

Where did this nobility in the face of darkness originate? In 1929, just

3 years after graduating from the Faculty of Medicine at the University of Buenos Aires, The Rizzoli Institute in Bologna, Italy awarded Dr. Ottolenghi a prestigious fellowship under the tutelage of another giant, Prof. Vittorio Putti, an avid promoter of modern orthopaedics [14]. Prof. Putti’s three radiologic criteria for diagnosing congenital hip displacement, known as “Putti’s Triad,” remains his most influential work in orthopaedics. Prof. Putti also supported early diagnosis and management of congenital hip

displacement, an unpopular perspective at the time [5]. Perhaps it was during his fellowship Dr. Ottolenghi learned the importance of character. Regardless of his colleagues’ dissenting opinions, Prof. Putti remained devoted to early treatment of congenital hip displacement. Similarly, in spite of his country’s political and socio-economic unrest, Dr. Ottolenghi, who likely could have gone anywhere to practice following his fellowship, returned to Argentina and joined the Orthopaedic Department at the Italian

Fig. 1 Carlos E. Ottolenghi MD. Photo courtesy of Prof D. Luis Muscolo.

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Hospital in Buenos Aires. Also like his mentor, Dr. Ottolenghi pursued new technologies and approaches to orthopaedic problems that few of his peers would consider.

In 1910, Prof. Erich Lexer, known for his pioneering surgical techniques of cosmetic and plastic surgery, performed the first massive fresh osteoarticular allograft after resection for a neoplasm. World War I interrupted Lexer's research and he never resumed the technique [3]. Few other surgeons seriously considered osteoarticular allografts, but it appealed to Prof. Ottolenghi as a limb sparing procedure. He performed the first massive fresh allograft to replace a calcaneus with chondromyxosarcoma in 1948 [8] and later reported a large case series using this technique [12]. To improve orthopaedic diagnosis and advance minimally invasive surgery, he developed aspiration needle biopsy, predating the Craig needle. His extensive validation of this technique in vertebrae remains a benchmark [6, 7, 10, 11, 15].

During his orthopaedic career at the Italian Hospital, Dr Ottolenghi wrote more than 120 papers, including his pioneering work in massive allografts for bone tumors [4, 9, 10], and bone aspiration techniques [6, 7, 10, 11, 15]. *Surgical Technique*, his textbook on bone aspiration, proved indispensable for several generations

of surgeons in Latin America [4, 9]. He even promoted the use of color television for advanced graduate medical education [13], often filming live surgeries and instructional videos (Fig. 2).

His desire to broaden the educational audience and share knowledge internationally led to his election as the first Vice-President of the Sociedad Latinoamericana de Ortopedia y Traumatologia, as well as being named President of the Argentine Association of Orthopaedics and Traumatology (AAOT). Immediate Past President of the Association of Bone and Joint Surgeons®, and Secretary of the AAOT, Prof. Miguel Ayerza MD offered his own unique perspective on Dr. Ottolenghi's legacy having worked at the Italian Hospital for more than a

quarter century. Reflecting on his own career, Prof. Ayerza recalled how Dr. Ottolenghi's spirit resonates through the halls of the hospital.

"After 26 years of practicing orthopaedics at the Italian Hospital of Buenos Aires, I am a witness of Dr. Ottolenghi's legacy: Medical assistance, teaching and research, believing in progress and truth but searching for the best and justice," Prof. Ayerza wrote in an email. "Although I met him once in 1983, I was able to receive his values through Prof. Muscolo, one of his favorite disciples that followed his steps during the last 48 years by having a noble and generous life with all his team from the Italian Hospital of Buenos Aires."

Fig. 2 Dr. Ottolenghi at the Italian Hospital of Buenos Aires with the prestigious French orthopaedic surgeon, Prof. Robert Merle d'Aubigne, a contemporary pioneer of massive allografts. Note the television in the background. Photo courtesy of Prof D. Luis Muscolo.

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Dr. Ottolenghi was a noble, generous man — a real leader and a true teacher, according to Prof. Muscolo.

“His strength of character, and his positive outlook arose from the nobility of his goals: He believed in progress, in truth, in searching for the best, and in justice,” Prof. Muscolo wrote. “When those are our true goals, there is always faith and enthusiasm, as we work from boundless inner strengths. Success is merely a consequence.”

Dr. Ottolenghi is certainly a well decorated orthopaedic surgeon, yet he often described himself as a simple family man, hospital physician, and university professor, in that order of importance.

“His overwhelming personality, his passionate convictions, and his self-respect could make him appear remote and detached,” Prof. Muscolo wrote. “Yet, there was no one more simple and austere in his personal life. In my view, that is Dr. Ottolenghi’s real legacy: Achieving success, through noble and generous behavior.”

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