



Professor Hugo Lorenz Obwegeser (1920–2017): An Icon of Orthognathic Surgery

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Prof. Hugo Lorenz Obwegeser (►**Fig. 1**) was a pioneering surgeon who was the first to describe the bimaxillary osteotomy in 1969. Born in Hohenems, in the Austrian part of the Rhine Valley, on October 21, 1920, he is known as the Father of Modern Orthognathic Surgery.

Dr. Hugo had degrees in medical and dental specialties and was dual-qualified. How Prof Hugo becomes a cranio-maxillofacial surgeon is an exciting and inspiring story.^{1,2} He obtained his basic medical degree in Austria and started working with a surgeon in 1945. He learned many surgical and orthopaedic procedures after working in two different places for a year. His uncle, an orthopaedic surgeon, advised him to learn pathology and pathophysiology as an essential foundation for future medical practice. He then moves to Vienna, helped by the grandmother of a young refugee patient once treated by him.

Dr. Hugo joins the renowned Rockitansky Institute of Pathology at the University of Vienna, where Landsteiner and Wiener had identified the four blood groups. He worked with Prof Hermann von Chiari, a pathologist, for two years. He even taught 'tuition' to students of pathology and microbiology to support him with some money for himself during the initial year. The pathology was exciting to him, reminiscent of a crime story, in reaching a final diagnosis through autopsies. Though he wished to continue working, he had to move out due to a prevailing Tuberculosis outbreak, which was fatal and affected many staff members.

Dr. Hugo was eager to pursue internal medicine or obstetrics and gynecology, but did not receive a paid position. He then met Prof. Richard Trauner, a well-known maxillofacial surgeon at the University Hospital in Graz, Austria, which defined his career in this field. It was a rather accidental meeting to help him with Photomicrographs for his publication, which Dr Hugo had familiarity with in pathology. Prof



Fig. 1 Prof. Hugo Lorenz Obwegeser, M.D., D.M.D, Prof.em., DDr.h.c., Hon.F.R.C.S.(Engl.), Hon.F.D.S.R.C.P.S.(Glas.), Hon.F.F.D.R.C.S.(Ire.)

Trauner offered him a paid position in training in maxillofacial surgery; though he was not keen to become a maxillofacial surgeon, took it as it was the fastest-growing option for his career. Working with Prof Trauner, he understood the broad scope of the speciality and undertook a formal dental training course for two years, which was then a subspecialty of medicine. Dr Hugo worked with Prof Trauner for six years, who then sent him to Sir Harold Gillies to learn reconstructive surgery at the Plastic and Jaw unit at Rooksdowne, House, London.

Dr. Hugo spent five months with Sir Harold Gillies from October 1951 to February 1952, and, learned several applicable principles of reconstructive surgery, including planning and handling soft tissues. Fascinated by his work, he mentions, "*From Sir Harold I learned so many principles and techniques that without the training with him, I could not have treated so many difficult cases as successfully as I did.*" While staying at Rooksdowne House, he met Ralph Millard and Ivo Pitanguy, two pioneers in plastic surgery. Sir Harold had

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invited Dr. Hugo to join along with Millard to write his book on Principles and Art of Plastic Surgery; however, he could not continue due to his professional commitments. He affectionately called Gillies 'Sir Harold' and described him as 'the most important pioneer of modern plastic surgery'.

The milestones in Professor Obwegeser's professional career are largely reflected in the progression of modern orthognathic surgery.^{3,4} In 1953, he described a sagittal split osteotomy for the mandible using an intraoral approach. The invention was revolutionary because the procedure was done intraorally without the need for a bone graft and without scars. In 1957, he performed the first osseous genioplasty. He then performed the first Le Fort 1 osteotomy in 1965, which demonstrated the total mobilization of the maxilla with emphasis on pterygomaxillary disjunction. He paved the way for modern orthognathic surgery by performing bimaxillary osteotomy in a single sitting, intraorally, in 1969.

Paul Tessier described and demonstrated Le Fort 3 osteotomy and other craniofacial procedures in the same era in 1967, which was very useful to Prof. Hugo. Dr. Paul and Dr. Hugo met in 1968, and they remained friends with mutual admiration, respect and professional interaction. Hugo and Paul were pioneers in their fields; Hugo worked extensively on the mandible and maxilla, while Paul worked on the maxilla, orbit, and cranium. The relation was so remarkable that, when Dr. Hugo retired after 40 years of extensive clinical work, he wrote a book on "mandibular growth anomalies" and requested Tessier to pen a foreword.⁵ Paul Tessier writes in the foreword, "*Was ever a foreword requested for God's words? It is not indecent to write a preface for Hugo's "Growing Mandible"? After training in the Jaw's Old Testament, Hugo is writing the New One that he taught for 40 years long!*"

Between 1958 and 1987, Professor Obwegeser's Zurich School of Cranio-Maxillofacial Surgery became a hub for surgeons worldwide, eager to learn these innovative and challenging procedures. Many around the world admired him as a mentor. At the American Society of Oral Surgery meeting in Washington, District of Columbia, in 1966,

Obwegeser introduced his orthognathic surgery techniques to North American surgeons.

Prof. Obwegeser was responsible for founding the European Association for Cranio-Maxillo-Facial Surgery (EACMFS) and leading craniomaxillofacial surgery with great commitment. He set up the "Hugo Obwegeser Traveling Scholarship" to aid young trainees. He made a significant impact on the development of maxillofacial surgery. He was the Chief Editor of the Journal of Oral and Maxillofacial Surgery and served as president of the German Society of Oral and Maxillofacial Surgery and the European Association of Maxillofacial Surgery.

Professor Obwegeser passed away peacefully on September 2, 2017, at the age of 97. His legacy will live on through the many trainees he trained and the knowledge he has imparted, which has impacted innumerable lives worldwide.

Conflict of Interest

None declared.

Acknowledgment

Photo courtesy: https://www.linkedin.com/posts/howardfar-ran_rip-to-prof-hugo-l-obwegeser-md-dmd-1920-activity-6313114671809392640-t8cc/?trk=public_profile_like_view

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