

History of Facial Plastic Surgery in Europe

Historical Review

Origins of Plastic Nasal Surgery

Partial or complete loss of the nose causes severe disfigurement of the face. This kind of trauma injures not just the human body, but also the mind. The destruction of the aesthetic and psychological integrity of a personality is among the cruelest testimonials of bygone eras. Many ancient sculptures bear witness to this act in symbolic form.

Cutting off the ears and nose as a form of punishment motivated the earliest attempts at reconstructive plastic surgery in India approximately 1,500 years ago. The *Indian rhinoplasty* was performed with a midline forehead flap in a concept that resembles methods still in use today. This technique was described by Sushruta in approximately 600 BC. Galenus mentioned that the Egyptians performed nasal operations, but they kept their methods a secret.

Much later, around 1430, the Branca family (first the father, later the son) developed a procedure for reconstructing the nose with a flap from the upper arm.

Gaspare Tagliacozzi (1545-1599), writing in the first textbook on plastic surgery, described techniques for nasal reconstruction that he adopted from Branca and refined. Although that occurred about a century after the Brancas used the upper arm flap, Tagliacozzi is still considered the founder of *Italian rhinoplasty*.

The human desire for the aesthetic rehabilitation of traumatic or congenital disfigurement, with an opportinity for social reintegration, was definitely the original motivation for reconstructive rhinoplasty.

The age of corrective aesthetic rhinoplasty was inaugurated by John Orlando Roe (1848-1915), an otorhinolaryngologist from Rochester, New York. This surgeon corrected saddle nose deformities through an endonasal approach. In 1891, Roe also used intranasal approaches for dorsal hump removal. Innovations in the functional aspects of rhinoplasty were later introduced by Mink, van Dishoek, Cottle, and others.

The Development of Plastic Surgery in Berlin and at the Charité Hospital from the 18th to 20th Centuries

Surgeons and rhinologists who practiced in Berlin from the 18th to the 20th centuries greatly influenced the subsequent development of functional-aesthetic rhinosurgery.

Carl Ferdinand von Graefe (1787-1840) was appointed from Wilhelm von Humboldt (1767-1835) as a first professor in ordinary of the Institute of Clinical and Ophthalmological Surgery at the newly founded Friedrich-Wilhelm University in Berlin in 1810 when he was just 23 years old. He was a skilled surgeon who had a keen interest in plastic surgery of the face and jaws. He performed the first successful repair of a cleft palate in 1816. For autologous nasal reconstruction, he used both the Indian and Italian techniques and added his own refinements. He corrected deformities of the face, especially those involving the lips, eyelids, cheek, and nose.

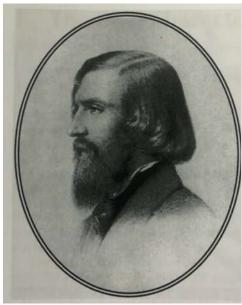


Fig.1 Carl Ferdinand von Graefe (1787 – 1840)

His son, Albrecht von Graefe (1828-1870) became the founder of ophthalmology as a medical specialty. He developed several principle surgical techniques for the therapy of cataract, strabismus, and glaucoma. He is the inventor of the ophthalmoscope.

Johann Friedrich Dieffenbach (1792-1847) succeeded von Graefe, who kindled his enthusisam for facial plastic surgery. Dieffenbach dedicated himself to refining the plastic surgical procedures of his day. He did pioneering work in such areas as cleft lip and palate repair, blepharoplasty, the surgical correction of strabismus, and tenotomy for the treatment of clubfoot. He promoted modern rhinoplasty by developing a dual-flap technique that repaired both cutaneous and mucosal defects, thereby reducing the problem of flap shrinkage.



Fig. 2 Johann Friedrich Dieffenbach (1792 – 1847)

He became internationally known through his first strabismus operation and numerous monographs. Along with Guillaume Dupuytren of France, Ashley Cooper of England, and Nikolai Pirogow of Russia, Dieffenbach was among the greatest surgeons of his time and is considered the founder of plastic surgery.

The following episode helped to establish Dieffenbach's special reputation in 19th-century Berlin: A charming young woman who attended society balls in 1831 and 1832 attracted considerable attention by always hiding her face behind a golden mask. Elvira Tondeau's secret was that her face had been disfigured by deep ulcerative lesions of the nose, presumably a result of tuberculosis cutis luposa. Dieffenbach was able to reconstruct her nose in several sittings. One year later, Elvira entered into a much-publicized engagement. Dieffenbach's accomplishment was immortalized in a contemporary folk song that claimed that "... he makes the nose and ears like new."

General aesthetica was developed in 1846, making painless surgery a reality. In 1878, Robert Koch published his paper "Studies on the etiology of wound infections." Joseph Lister (1827-1912) paved the way for germ-free operations. Berhard von Langenbeck (1810-1887) was Dieffenbach's successor at the Berlin Charité Hospital, specializing in plastic surgery.

Langenbecks successor, Ernst von Bergmann (1836-1907), was one oft he most influential surgeons of his time, introducing the principle of asepsis to surgery. His guiding rule was that everything that came into contact with the operative field and especially with the surgical wound had to be absolutely sterile.

Jakob Lewin (Jacques) Joseph (1865-1934) was a pioneer of modern rhinoplasty. He studied medicine in Berlin, graduated in Leipzig in 1861, and opened a private practice in Berlin. Shortly thereafter, he joined the Berlin University Orthopedic Hospital, headed by Julius Wolff (1836-1902), where he received extensive surgical training. In 1896, he was referred to the hospital for the correction of prominent ears.

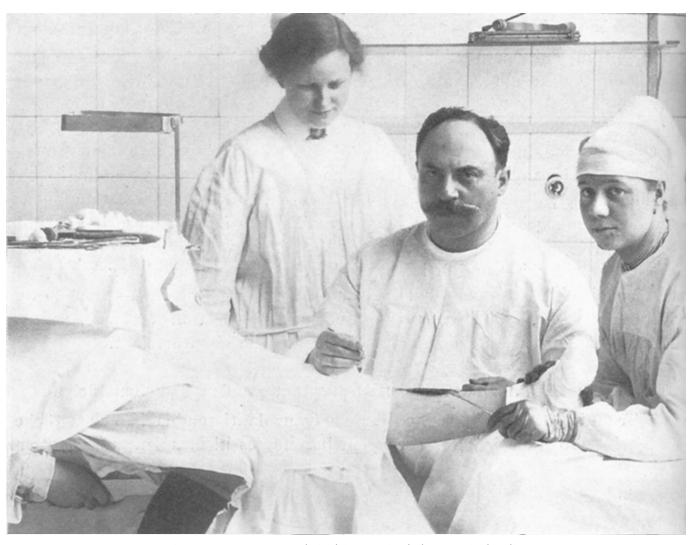


Fig. 3 Jacques Joseph in his surgical theatre in berlin

In 1898, Joseph performed the first reduction rhinoplasty at his office, using an external approach. He also did pioneering work in several other areas, including the treatment of both morphological and functional abnormalities in one sitting, the use of intranasal approaches, and the establishment of aesthetic surgery as a medical speciality.

It is "not vanity which is the driving motivation, but the feeling of being disfigured and, conversely, the aversion to disfigurement and its psychological consequences." Rhinoplasty "seeks to cure psychological depression by restoring a normal shape to the nose. Its social importance is beyond question, and it represents a significant branch of surgical psychotherapy."

In 1904, Joseph reported on the first operation in which the intranasal removal of a dorsal hump was combined with correction of the anterior septum. At that time, intranasal operative techniques were considered "unsurgical" procedures that were handicapped by poor exposure and a high infection risk.

From 1916 to 1921, Joseph was director of the Department of Facial Reconstruction at the Charité Ear and Nose Clinic in Berlin, headed by Carl Adolf Passow (1859-1926). At that time, he worked mainly in the plastic reconstructive surgery of extensive facial injuries that were sustained during World War I.

Owing to his great success, Joseph received an honorary professorship in 1919.

Later, he started his own hospital and specialized in aesthetic surgery with an emphasis on rhinoplasty and mammoplasty. His colleagues included Gustav Aufricht and Joseph Safian.

Jacques Joseph is considered the founder of modern rhinoplasty. Curiously, three professors named Joseph were working in Berlin at the same time. The nasal surgeon among them was popularly known as "Noseph" to distinguish him from his gastroenterologist and dermatologist colleagues.

Aufricht later traveled to America, published numerous works, and became a respected nasal surgeon in the United States. He died in New York in 1984.

Joseph summarized his experience in an atlas and textbook with the lengthy title "Rhinoplasty and Other Facial Plastic Surgery with an Appendix on Mammoplasty and Several Other Operations in the Area of External Plastic Surgery."

Joseph was buried in the Jewish Cemetery in Berlin-Weissensee, not far from our hospital. His gravesite was destroyed by bombs during World War II and considered as given up for many years. Joseph's wife, Leonore, emigrated to the United States, where she died at a grand old age, impoverished, in 1968.

In 2003, Walter Briedigkeit, a retired professor of pediatric cardiology from Berlin, found the destroyed gravesite and remnants of the gravestone of Joseph's grave.

During the international course "Essentials of Septorhinoplasty" in the same year, he initiated a wordlwide campaign for collecting money for the restoration of the gravestie. The project was generously sponsored by many personal gifts and donations and by scientific societies such as the American Academy of Facial Plastic and Reconstructive Surgery and the European Academy of Facial Plastic Surgery. Great support during all activities of rebuilding the destroyed gravesite by the Privat-Institut für Medizinische Weiterbildung und Entwicklungen auf dem Gebiet der HNO-Heilkunde e.V. Berlin (www. Imwe-berlin.de) came from Gene Tardy Jr.

On October 17, 2004, Joseph's gravestone war consecrated by a ceremony in the Jewish Cemetery in Berlin-Weissensee. The stone reflects the eventful history of the grave: on the front is the new inscription on polished Swedish granite. The back of the stone has been left just as it was when it was found-broken, overgrown, damaged, with fragments of the original inscription.



Fig. 4 Consecration at the grave of Jacques Joseph 2005 in Berlin-Weissensee by Andreas Nachama



Fig. 5 Visit to the grave of Jacques Joseph during the course Nose & Face 2005. In front Walter Briedigkeit, behind Richard Goode, Eugene Tardy, Regan Thomas and others

The further course of facial plastic surgery in Europe

I am very grateful to Gene Tardy for some personal information on the development course of facial plastic surgery in Europe.

"The opening Symposia held by Prof. Horst Wullstein in Würzburg`s new Kopf Clinic in October 1979, bringing together the most outstanding surgeons from the USA and Europe, stands as a landmark in the development of facial plastic surgery in Germany and Europe.

This was an exiting moment, and I will never forget the enrichment brought to the event by Horst Wullstein (a true visionary in facial plastic surgery), Hans Denecke, Rudy Meyer, John Conley, Richard Farrior, Richard Webster and others. This stands as a key summit meeting in the development of facial plastic surgery in Europe."

Two personalities were especially important for the development of european facial plastic surgery.

Claus Walter (1927 – 2016) graduated his training at the university of Ann Arbor, Michigan and Ohio.

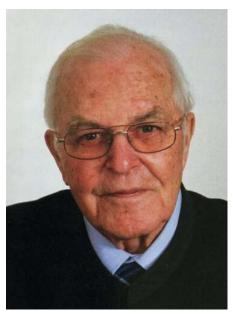


Fig. 6 Claus Walter (1927 – 2016) (photo Claus Walter)

He was early coined by the famous rhinoplasty courses at Mount Sinai Hospital in New York. In 1956 he returned to Germany and aquired a specialist title for ENT, surgery and plastic surgery. Later he became the Head of departments of ENT, for instance in Essen and later for plastic and reconstructive surgery in Düsseldorf. In 1983 he changed to the Rosenberg Clinic in Switzerland. For decades he was a consultant for difficult plastic-recontructive procedures all over the world. Claus Walter was on the one hand a gifted exceptional surgeon with magic hands, on the other hand a restless academic teacher and author numerous scientific publications. His Thieme-textbook "Plastic-surgical procedures in Head &. Neck" is a standard work even today..

And not at least he was a generous, charismatic personality, with the ability to inspire generations of young surgeons.

I have had some unforgetable personal encounters with Claus Walter in various phases of my professional development. The last meeting was in Regensburg three years ago. He explained his surgical concepts to me on the basis of concret very difficult cases in the breakfast room of the congress hotel. For a great surgeon you need: experience, courage, ingenuity, magic hands and fortune – he had it.

The fast and elegant development of facial plastic surgery in Europe is to be thanks also to Tony Bull (1934 - 2016), a outstandig personality of our specialty in the last decades.

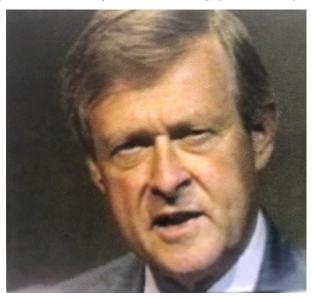


Fig. 7 Tony Bull (1934 – 2016) (photo Archives of facial plastic surgery)

In his obituary Gene Tardy formulated "He mastered the operating microscope and early on adapted it for televised demonstrations of intranasal surgery. He was drawn to the artistic nature of rhinoplasty, and by extension facial plastic surgery, as it blossomed and developed in the 1970's. Travels to New York to learn from Irving Goldman resulted in a life-long dedication to the value of the Goldman tip in nasal surgery. Tony was intrigued early along by the pioneering dedication to education and excellence of the American Academy of Facial Plastic ans Reconstructive Surgery, and in Tandem with Claus Walter of Germany, set about to organize and establish the professional nature of the European Academy of Facial Plastic Surgery (the Joseph Society). He lectured and taught tirelessly throughout the capitols and countries of Europe (frequently at his own expense), establishing a dedication to excellence that was infectious.

Tony Bull had a dry English humor and an aphonic timbre after an ideopathic vocal cord paralysis. Those were parts of his sharply drawn, outwardly rugged, but to those who knew him – warm personality. At a congress in London after his lecture on endoscopic sinus surgery I asked him whether he would include the medial turbinate in his surgery and how. The answer was: "Sometimes I do – and sometime I do not".

The further development of facial plastic surgery has been promoted to a decisive extent in recent decades by the Joseph Society, the later European Academy of Facial Plastic Surgery. In addition, many congresses and courses have taken place in many countries. I particulary fonder remember the winter meetings in Flims Laax. The offers are diverse and so every member of the Academy can experience personal and individual advancement and development. Special highlights were for example the Rhinoplasty

Summits in Ulm by Gerhard Rettinger, Berlin und Munich by Alexander Berghaus.

For me internships with Gene Tardy and Gilbert Nolst Trenite were a special stimulus. Also the participation in big Kongresses in Chicago, Buenos Aires und New York.



Fig. 8 Faculty and participants of our Berlin course of Septorhinoplasty 2005 in Berlin (photo Dieter Jaeger)



Fig. 9 Gene Tardy and two young colleagues during the live cadaver dissection (photo Dieter Jaeger)



Fig. 10 During the dissection (photo Dieter Jaeger)

At our home-couses Essentials of Septorhinoplasty 2003, Nose &. Face 2005 and Nose, Sinus &. Implants 2010 we had the previlage to welcome world class experts like, Gene Tardy, Regan Thomas, Richard Goode, Gilbert Aiach, Gerhald Rettinger...and participants from over 30 contries as a basis of a professiuonal dialog-

I think the further development of facial plastic surgery is in good hands in our Academy – a reason to look to the future with optimism.

References:

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Author:

Prof.Dr.med. Dr.h.c. Hans Behrbohm Head of the department of ENT/Facial Plastic Surgery Park-Klinik Weißensee Academic Teaching Hospital University Clinic Charité Berlin Schönstr. 80 13086 Berlin

www.park-klinik.com

behrbohm@park-klinik.com

phone: 030 9628 3852 Fax: 030 96283855