

HISTORY OF DERMATOLOGY

Pioneers of Spanish Dermatologia Surgery

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Abstract. Even before dermatology was born as a specialty at the beginning of the 19th century, most skin lesions and dermatoses tended to be treated by surgeons rather than physicians. After medicine and surgery were unified into a single discipline and dermatology emerged as a modern specialty, this relationship became blurred and Spanish dermatologists leaned more towards medicine than surgery. Then improvements in surgical techniques, knowledge of antiseptic and aseptic procedures, the development and introduction of anesthesia, and the greater interest in micrographic approaches led to the rediscovery and almost complete rebirth of this old surgical tradition in the second half of the 19th century. In Spain, dermatologic surgery as such did not really exist until the first third of the 20th century, when Enrique Álvarez Sainz de Aja and Vicente Gimeno emerged as the main exponents of this discipline. Of these 2, Álvarez Sainz de Aja—drawing on his previous experience as a general surgeon and obstetrician—was the better practitioner of the incipient dermatologic surgery. The other, Gimeno, wrote an interesting booklet on dermatologic surgery that was published in 1923 and that formed the basis of his inaugural speech to the Spanish Royal National Academy of Medicine.

Key words: history of dermatology, dermatologic surgery, history of dermatology in Spain

PRECURSORES DE LA CIRUGÍA DERMATOLÓGICA ESPAÑOLA

Resumen. Aun antes del nacimiento de la Dermatología como especialidad a principios del siglo XIX, la mayoría de las lesiones cutáneas y dermatosis eran materia de los cirujanos más que de los médicos. Después de la unificación de la Medicina y de la Cirugía, y del nacimiento de la Dermatología como especialidad moderna, esta relación se fue desdibujando y los dermatólogos españoles se aproximaron más a la Medicina que a la Cirugía. Las mejoras en la técnica quirúrgica, en la antisepsia y la asepsia, el nacimiento y difusión de la anestesia y el mayor interés en los estudios micrográficos llevaron a la recuperación, casi *de novo*, de esta vieja tradición quirúrgica en la segunda mitad del siglo XIX. En España, no se puede hablar de una auténtica «cirugía dermatológica» hasta el primer tercio del siglo XX, cuyos principales exponentes fueron Enrique Álvarez Sainz de Aja y Vicente Gimeno. El primero de ellos fue el mejor práctico de la incipiente cirugía dermatológica que basaba en su experiencia previa en Cirugía General y Obstetricia. El segundo nos dejó un interesante opúsculo de cirugía dermatológica, publicado en 1923 y que fue el texto de su discurso de recepción en la Real Academia Nacional de Medicina.

Palabras clave: historia de la Dermatología, cirugía dermatológica, historia de la cirugía dermatológica en España.

Although most dermatologists would probably hold the view that dermatologic surgery is a relatively new field within the specialty, this is not entirely accurate. It is true that the incorporation of new therapeutic technologies has promoted dermatologists' interest in the surgical side of

our specialty, but there was an earlier surgical tradition that has been forgotten. More than 50 years ago, a certain dermatologist wrote the following¹:

It is truly curious that a specialty that we have always called medical, a specialty such as ours, in which the "microsurgery" of biopsies is almost our only contact with the scalpel, is today trying to find its surgical bearings after so many years of development. It is no less true that it is ever more necessary to set out on this road, so poorly understood or even scorned by our predecessors, and which has such categorical indications that the dermatologist

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cannot and must not discharge this duty to other hands less experienced or knowledgeable in matters of the skin than his own.

The aim of this paper is to provide a record of certain notable figures and facts as a testimonial to our specialty, allowing us to situate our daily surgical practice in the historical context of Spanish dermatology. For the purpose of greater objectivity and historical relevance, I shall limit myself to sources that date from over 50 years ago. In fact, the most recent primary source cited is from 1958.²

Dermatoses in Renaissance and Modern Surgery

Nowadays it seems reasonable, even obvious, that we should be qualified in medicine and surgery, but this has not always been the case. For centuries, the practice of these 2 disciplines was totally independent. In fact, until the middle of the 19th century, the 2 disciplines were taught in different centers. Physicians studied in Latin, which was the lingua franca of knowledge. Surgery, on the other hand, was not even a uniform profession but rather divided into 3 categories: the lowest level was the barber-bloodletter, for which no knowledge or qualification was required other than personal experience; at the next level we find the romancist surgeons, who studied in vulgar or romance languages; finally, the elite of surgery at that time was found in the Latin surgeons, who studied in Latin. Access to this latter grade was controlled by the Tribunal of the Protomedicato, which, through qualification or certification, acted as guarantor of a minimal command of the knowledge that surgeons required for their practice.

The Renaissance could be a good starting point for this review of dermatologic surgery because, coinciding with the growing thirst for knowledge, dissections became a widespread practice and there was an improvement in the knowledge of anatomy. By the 16th century, surgical texts were already referring to disease processes that are the domain of dermatology. Apostemes (a miscellaneous group of tumors and excrescences), swellings (various types of cysts, probably trichilemmal and infundibular cysts), lamparones (mainly lymphadenopathies), chronic wounds (varicose and trophic ulcers), and chancroids are described and details given of their management and treatment. Even so, the treatment of these conditions was not uniform among the various authors who discuss them. Some included other disorders related to dermatology such as carbuncles, abscesses, herpes, erysipelas, and gangrene. In the context of humoral medicine, all these conditions were typified into wet or dry and hot or cold, leading to the application of the corresponding opposing therapy. Interesting examples from this period are the works by Luis Mercado, Francisco

Díaz, Juan Fragoso, Juan Calvo, and Dionisio Daza Chacón. However, the separation between medicine and surgery persisted, as was eloquently explained by Professor López Piñero³:

During the 17th century, the traditional separation between physicians and surgeons became yet more pronounced in the majority of European countries. From his privileged position of university professional, the physician had learned to publicly deplore anything that involved using his hands. According to a text published in that century and aimed at students of medicine, "The physician should not cut, burn, or apply dressings, as these are incompatible with the dignity of a rational physician, and by performing these acts they will become barbers."

The Spanish Translation of *Doctrina de Morbis Cutanei* by the Surgeon Joseph Plenck

In the 18th century, the sum of knowledge about surgical skin conditions increased considerably and texts began to appear on "external diseases." In these texts, we find descriptions of the management of primary skin conditions as well as information on other types of disorder, such as injuries, fractures, and knife and bullet wounds, which have nothing to do with dermatology as we know it today. At the end of the 18th century, in the year 1776, a surgeon, Joseph Plenck (Figure 1), published in Vienna what may be considered to be one of the first treatises on Dermatology, his famous *Doctrina de Morbis Cutanei*. This book was translated into Spanish by Antonio Lavedán, also a surgeon, and was published in Madrid in 1798 (Figure 2). In 1978, the pharmaceutical company Isdín published a facsimile edition of this text, with an interesting prologue by Juan Uruñuela. Although this text, with its new system for classifying skin diseases, using the methodology used by botanists, could be considered as the birth of modern dermatology, the most important modern day historians usually associate this with the publication in 1808 of another work, *On Cutaneous Diseases*, by the English physician Robert Willan.⁴

About the Unification of Surgery and Medicine Into a Single Discipline

During the 18th century, major figures in Spanish medicine, such as Martín Martínez and Francisco Suárez de Ribera, were crying out for the unification of surgery and medicine into a single discipline. However, apart from these notable exceptions, physicians continued to shy away from closer



Figure 1. Joseph Plenck was a prominent Austrian surgeon who, in 1776, published one of the first independent treatise of skin diseases. His novel system for classifying the dermatoses, using a botanic-style classification, made him worthy of figuring since that time as one of the pioneers of dermatology, endorsing the age-old link between dermatology and surgery even before the unification of medical and surgical studies.

ties with surgery. It was the surgeons who made the greater effort to approach medicine. Pedro Virgili (Figure 3), a Spanish military surgeon trained in Montpellier and Paris, was particularly significant in accomplishing this. He created the Cadiz Royal College of Surgery in 1748, set up for the surgeons of the Navy. In this college, as in the one in Barcelona created soon after, surgeons were required to have a broad knowledge of medicine, knowledge which, until that time, had been forbidden to them and, even when they had it, they were not allowed to use it.⁵ The steps taken after this time were somewhat wavering, even alternating, with official regulations and orders that variously promoted and halted this fusion, probably influenced by the convulsive political panorama of the War of Independence, the reign of Fernando VII and the succession of liberal and conservative governments, and the fluctuating power of the pressure group of the more conservative physicians who tried to impede this. However, convergence was unstoppable. Unification became official in 1827, creating the first Colleges of Medicine and Surgery and the title of Physician-Surgeon; nevertheless, it did not become effective until the

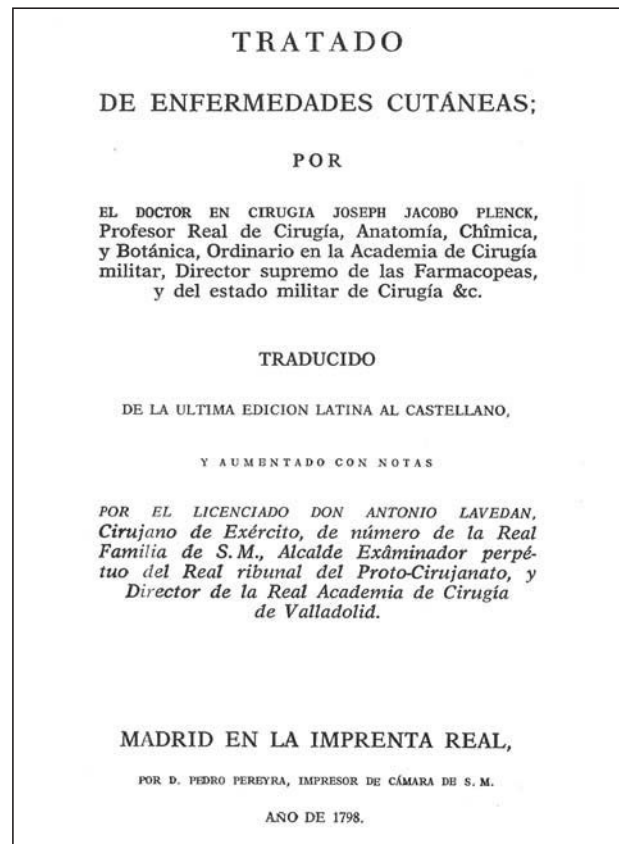


Figure 2. Frontispiece of the Spanish edition of the book by Plenck, translated by Antonio Lavedán, also a surgeon, and published in 1798. The majority of skin lesions and dermatoses were still more closely linked to surgery than to medicine.

study plan of 1843 and its reform in 1845, and only then achieved definitive consolidation with the centrist state university model, crystallized in the famous Moyano Law of 1857.⁵⁻⁷ The romancist surgeons and barber-surgeons were left out of this merger and, after a number of changes in their title, they became known as “practicantes.” Later on, in the middle of the 19th century, they became integrated with midwives and nurses under the title of technical health assistants; finally, all of these qualifications were included in the modern-day nursing diploma.⁷

Pictorial Record of the First Skin Flaps in Spanish Medical Literature

From earlier times, surgeons already knew the techniques for designing and performing various skin flaps and plasties. The first scientific references to the use of skin flaps date from 1546 and come from Gasparo Tagliacozzi, Professor of Anatomy in Bologna. A classic example of the use of flaps during this period was to correct nasal defects with



Figure 3. Pedro Virgili was an eminent Spanish military surgeon of the 18th century, who was responsible for the creation of the Royal Colleges of Surgery—particularly the one in Cadiz—to train expert surgeons for the Navy. He encouraged the unification of surgical and medical knowledge, following the French model, understanding that Navy surgeons should have sufficient medical knowledge to be able to diagnose and treat disorders as effectively as possible whilst at sea.

pedicled flaps from the forehead, performed by the Hindus and published in 1794 by the English East India Company.¹ However, graphic records and illustrations in the Spanish medical literature are less common and appear relatively later. Figures 4A, B, and C show a series of prints published in 1875 in *Anfiteatro Anatómico Español*.⁸ These pictures, under the title of “A case of autografting to the cheek,” show the case of a person living in Guadamur, in the province of Toledo, who was operated in the Surgery Department of Hospital Provincial de la Misericordia, Toledo, to repair a defect caused by a carbuncle. The infection had caused a large transmural ulcer. As a consequence of the tissue loss, the patient suffered exposure of the gums and teeth, salivation through the large fistula, and difficulty swallowing, with the escape of food through the defect. The patient was operated by Dr Pedro Gallardo on November 12, 1874. In the text, the author states the usefulness of the “Resúmenes de Cirujía [sic]” (*Surgical Abstracts*) by Dr Diego Argumosa, inspiring him to perform this operation.

José Eugenio de Olavide and Federico Rubio

We have no record that José Eugenio de Olavide, the great pioneer of Spanish dermatology, had any extensive surgical activity. Curiously, his biographer, Fernández de la Vega, tells us that Olavide’s father, José María, was a Latin surgeon.⁹ In addition, his first publications in 1857, while he was still a medical student, were brief accounts of surgical interventions performed in the departments headed by Sánchez de Toca and de Soler. Olavide was a resident student

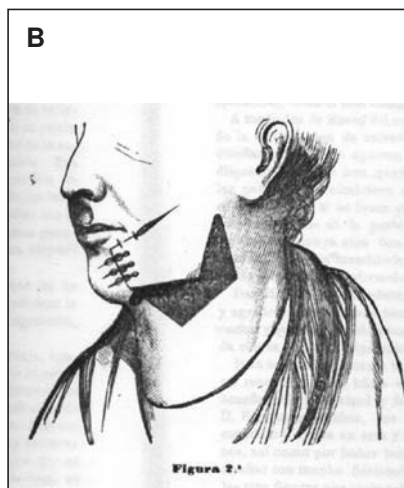


Figure 4. This sequence of surgical etchings was published in 1875 in Dr Velasco’s Journal, *Anfiteatro Anatómico Español*. The etchings are of a 38-year-old patient who, after suffering a carbuncle of the left cheek, presented marked tissue loss that made it impossible “to chew or suck on the affected side” (Figure 4A). The patient was operated in the Department of Surgery of Hospital Provincial de la Misericordia, Toledo, by Dr Pedro Gallardo, fixing the autograft with 3 sutures and 3 gold pins (Figure 4B). Although the patient suffered serious postsurgical erysipelas (“the thermometer reached 41 °C”), the gold pins were withdrawn after 4 days, “and later the sutures,” and the patient was discharged 1 month and 6 days after the operation, completely cured (Figure 4C).

in these departments,¹⁰ but these publications are not related to dermatologic surgery. Fernández de la Vega⁹ also gives us another curious fact, which is that Olavide entered the Hospital de San Juan de Dios as a surgeon!

He rose to chief physician of the Casa de Campo in 1860, and when 2 charitable provincial surgical posts became available in competitive state exams, in Hospital San Juan de Dios and another general hospital, he was offered both positions, first on the 19th shortlist of applicants, and was awarded the post in Hospital San Juan de Dios.

In Olavide's vast *Atlas* we can see a picture of a carcinoma of the upper eyelid (Figure 5), with the outline of the surgical reconstruction that was subsequently performed. As Olavide tells us in the accompanying text, the patient had been seen by the distinguished surgeon, Federico Rubio (Figure 6), who wanted to perform the operation. The patient was admitted to Hospital de San Juan de Dios and underwent a successful operation, although there are no pictures of the postoperative result. Federico Rubio Galí was a respected surgeon of the second half of the 19th century. He was a versatile person. Apart from his prominent surgical activity, he may be considered the father of modern nursing in Spain, after creating the first School of Nursing in his *Instituto de Técnica Operatoria* (Institute of Operative Techniques) in Madrid in 1895, following the example of Florence Nightingale in St Thomas' Hospital, London, since 1860.¹¹ Apart from Surgery, Federico Rubio promoted the incipient histopathology, mounting the microscope preparations of his operations and autopsies himself. In the above-mentioned *Atlas* by Olavide there are a number of macroscopic images of syphilitic livers with accompanying images of the microscopic studies performed by Rubio himself.

Juan de Azúa and Dermatology as a "Natural Specialty" of Surgery

In the case of Juan de Azúa, creator of the Spanish Academy of Dermatology, we also have no record of any particular surgical activity. In his writing, there are only fleeting mentions of a few basic techniques such as simple excisions and the use of electrocautery. However, it is of particular note that one of his most interesting works, which describes professional washerwoman's dermatitis and was probably one of the first and best descriptions of professional irritant contact eczema, was presented in the Hispano-Portuguese Surgical Conference held between April 16 and 24, 1898, in Madrid.¹² Such a presentation would appear to be completely out of place in a surgical conference, particularly as none of the therapeutic measures that he proposed was

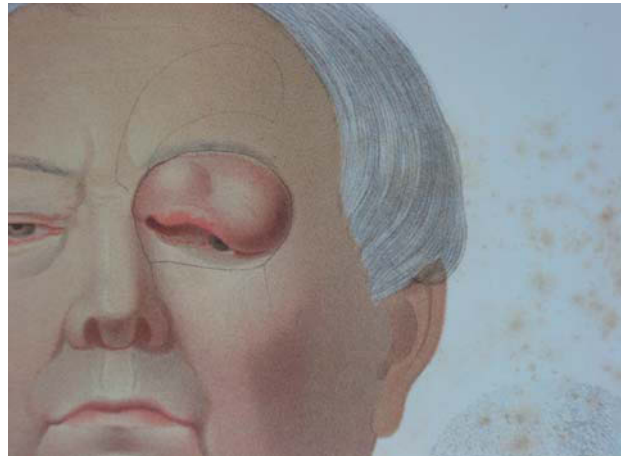


Figure 5. Although Olavide was the son of a Latin surgeon, he did not leave us a record of extensive surgical activity. This image of a palpebral tuberosity in a patient of Dr Federico Rubio appears in his magnificent *Atlas*, published in installments after 1873. A light, broken line shows the outline of the reconstruction flap used to repair the area of the eyebrow after excision.



Figura 6. Federico Rubio, an important figure in Spanish surgery, was a great friend and colleague of Olavide. He even prepared his own histologic specimens. However, the greatest merit of this versatile physician and surgeon was, perhaps, the creation of the first school of nursing in Spain.

surgical. This apparent contradiction may be understood by rereading the full title of the congress: Annual Hispano-Portuguese Conference of Surgery and of its Natural Specialties (Figure 7). At that time, dermatology was considered to be a natural specialty of surgery and therefore anything that involved dermatology had its place in surgery.

The Integration of the Medical and Surgical Specialties Into University Teaching

The relationship of dermatology with surgery may also be seen in the area of university teaching; here, dermatology

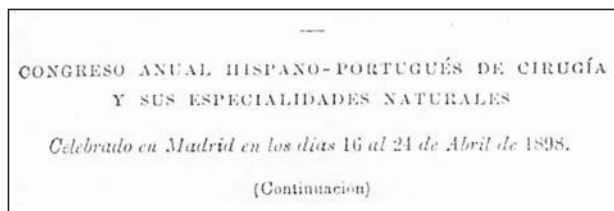
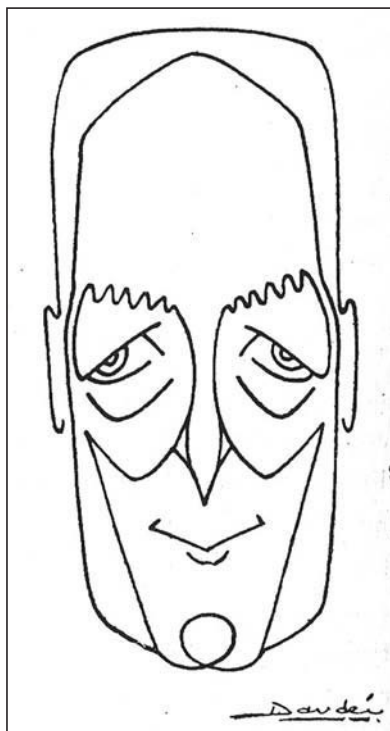


Figure 7. Azúa's presentation of washerwoman's dermatoses to the Hispano-Portuguese Congress of Surgery was included in the Spanish section of scientific societies of the *Revista de Medicina y Cirugía Prácticas* in 1898 under the curious heading Annual Hispano-Portuguese Conference of Surgery and of its Natural Specialties. Azúa's subject, which at first glance has nothing to do with surgery, demonstrates that the long-standing relationship between dermatology and surgery persisted throughout the 19th century.

Figure 8. Caricature of Sainz de Aja drawn by Dr Daudén and published in 1956 in *Actas Dermo-Sifiliográficas* (1956;47:358). Sainz de Aja was a founding member of the Spanish Society of Dermatology and Syphilography, now the Spanish Academy of Dermatology and Venereology. He was a strong supporter of Franco during the Spanish Civil War and this allowed him to act as a figurehead for the deplorable state of Spanish dermatology in the postwar period.



became established as an obligatory subject for qualification and the first professors' chairs were created at the same time as those of 2 other medicosurgical specialties: ophthalmology and otorhinolaryngology. In fact, in the medical literature of the early years of the 20th century, these 3 fields were jointly referred to as the medicosurgical specialties.¹³ In 1902, these chairs in the Universidad Central de Madrid were held as interim positions by Mansilla (Ophthalmology), Cisneros (Laryngology), and Azúa (Dermatology and Syphilography). Azúa was appointed definitively to the Chair of Dermatology on March 7, 1911, and took effective possession on April 9, 1911.

Sainz de Aja, the First Great Spanish Dermatologic Surgeon

Up to here I have reviewed the relationship between classic dermatology and surgery. However, there was still no true dermatologic surgery as we understand it today. In the second half of the 19th century, the improvement in surgical techniques and instruments, antiseptics and asepsis, and the increased interest in histopathologic study formed the basis for the return to the surgical origins of the specialty. The great pioneer of Spanish dermatologic surgery appeared in the early part of the 20th century. Unquestionably, this person was Enrique Álvarez Sainz de Aja (Figures 8-10). This eminent dermatologist was born in Madrid on September 16, 1884. During his medical studies, which he undertook in the Colegio de San Carlos, Madrid, he was a resident student of surgery in the department headed by Alejandro San Martín and in the Department of Obstetrics,

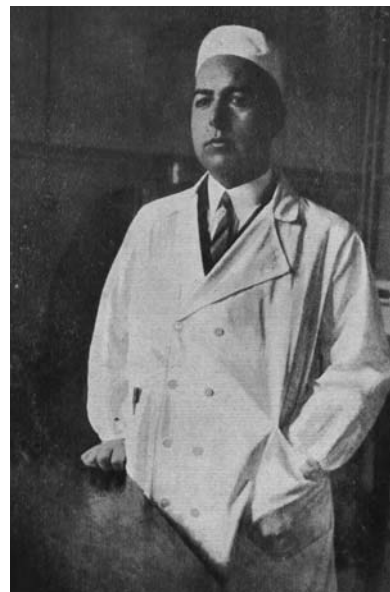


Figure 9. Photograph of Sainz de Aja with white coat and surgical cap, published in *Ecos Españoles de Dermatología y Sifiliografía* in 1927. Sainz de Aja came to dermatology with extensive experience in general surgery and obstetrics that he had acquired during his undergraduate training in both specialties and subsequently as assistant professor of obstetrics soon after qualifying.

under Professor Fernández Chacón. His doctoral thesis was titled *Concerning peritonitis due to intraperitoneal perforation of the digestive tract*. In June 1907, he was appointed as Professor of Clinical Medicine and tutor of the Madrid Faculty of Medicine, and worked under Dr Chacón (Obstetrics). He held this post until 1912.¹⁴ On August 1, 1908, he took up a post at Hospital de San Juan de Dios, now concentrating his activity in the field of dermatology. There is no doubt that this previous experience was a decisive factor in his evident surgical inclination. He was also a pioneer in the use of various physical therapies in dermatology, such as phototherapy, radiation therapy, and cryotherapy.

Sainz de Aja was also a tireless worker and medical communicator. He attended numerous international conferences and was one of the most influential promoters of the Iberian-Latin American College of Dermatology. During the Spanish Civil War, he embraced the Nationalist faction. His principal achievements were the regrouping of the Spanish Academy of Dermatology—though it was considerably weakened by the exile of important figures such as Sánchez-Covisa, Bejarano, and Peyrí—and the reinitiation, together with Gay Prieto and de Gregorio, of the publication of *Actas Dermo-Sifiliográficas* in 1937.

Although he had some disciples, Sainz de Aja did not build up an authentic school of dermatology. This was probably because his work in Hospital de San Juan de Dios in Madrid was mainly in medical practice and he did not dedicate himself to the university teaching of dermatology. Even so, a number of prominent figures in Spanish dermatology, such as Julio Bravo, José Fernández de la Portilla (first professor of the specialty in Valencia), Cordero, Ricardo Bertoloty, and Álvarez Sainz de Aja's own son, Luis Álvarez Lowell, may be considered his successors. This is probably the reason that the merit for the inception of dermatologic surgery in Spain has been gradually forgotten. It was Gay Prieto, in 1965, who was responsible for reminding us about it¹⁵:

“Further on there was a spacious operating theater, in which don Enrique, remembering his surgical background, was the pioneer of medicosurgical dermatology.”

Vicente Gimeno, Author of *About Esthetic Surgery of the Skin*

Vicente Gimeno Rodríguez-Jaén was an important figure in Spanish dermatology who must be reinstated from inexplicable obscurity. He was born in Valencia on March 9, 1878, son of Amalio Gimeno, also a physician and later named Count Gimeno by Alfonso XIII, a title inherited by his son. He qualified in medicine from the Colegio de

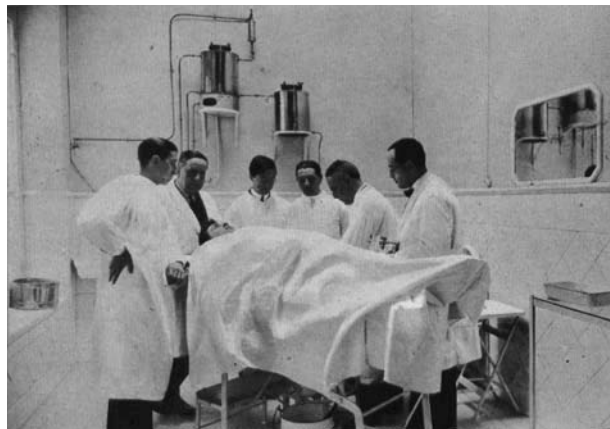


Figure 10. Photolithograph, also published in *Ecos Españoles de Dermatología y Sifiliografía* in 1927, in which Sainz de Aja may be seen with a number of his colleagues performing a surgical intervention.

San Carlos in Madrid in 1906, completing his training in dermatology at Hospital de Saint Louis in Paris. He was appointed Honorary Assistant Professor of Dermatology and Syphilography of the Barcelona Faculty of Medicine, although he soon abandoned this post due to a change of residence. In 1911 he was named Interim Assistant Professor of Dermatology and Syphilography of the Madrid Faculty of Medicine, being appointed as the full professor in 1914. He continued his studies in Germany and Switzerland and, in particular, under Professor Wright at Saint Mary's Hospital in London. He even became involved in politics: he was member of parliament and senator and, for a time, Provincial Governor of Seville before the Second Republic. He was a member of the Royal National Academy of Medicine (RANM). He died on August 29, 1944, in the spa town of Caldas de Malavella.¹⁶

In 1923 Vicente Gimeno was elected as a member of the RANM to take the place of Juan de Azúa, who had been elected years earlier but could not take possession of his seat due to his severe hemiplegia. His inaugural speech carried the surprising title of “About esthetic surgery of the skin” (Figure 11).¹⁷ The justification for such an original speech could be due to the fact that his admission to the academy was in the Surgical Section. This adds yet further strength to the previously expressed idea that dermatology continued to be considered traditionally as a branch of surgery, even though dermatologists were attempting to achieve ever closer links with internal medicine. After dedicating the first part of his speech to a portrayal of his predecessor, Juan de Azúa, as was required by RANM protocol, Vicente Gimeno then offered us a vast compendium of dermatologic surgery in the Spain of almost a century ago. Unfortunately, as this was an oral presentation according to protocol, it was not published with any accompanying figures or drawings. For the first time in

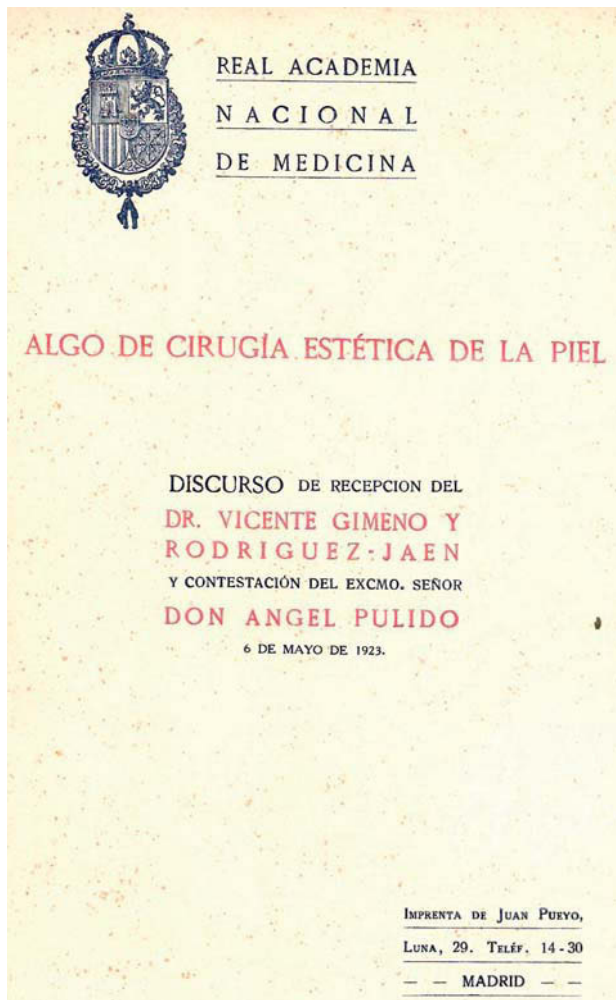


Figure 11. Vicente Gimeno, dermatologist and professor of dermatology together with Azúa, entered the Royal National Academy of Medicine in 1923. It was Gimeno who substituted Azúa in this post. Azúa was never able to take effective possession of the post due to the severe hemiplegia that affected him in the latter years of his life. Over 80 years ago now, Vicente Gimeno dedicated his inaugural speech to the academy to dermatologic surgery. This surprising decision is perhaps explained by the fact that the chair he occupied actually belonged to the Department of Surgery. Despite the years that have passed, we find his clear and engaging text to be a summary of basic dermatologic surgery.

Spanish medical literature, Vicente Gimeno made reference to *esthetic dermatologic surgery*, which he defined thus¹⁸:

... that in which therapy is neither pharmacologic nor preventive; it thus includes all those physical agents that may be used, such as, for example, the hand and instruments, or therapeutic resources such as light or electricity.

Though the majority of surgeons he cites in his work are French-speaking—Morestin, Reverdin, de Martel, Noel, Passot, Chassaingne, Poncet, and Berard—he also mentions Kendal Franks, Pozzi, Hebra, and Auspitz. Gimeno began by defining the scope and indications for esthetic dermatologic surgery, which he divided into 3 groups: first, abnormal elements of the skin or those that “alter its surface, leading to disfigurement or deformity”; second, the repair of soft tissues damaged by injury, burns, or destructive dermatoses (syphilis, tuberculosis, etc); and third, iatrogenic scars, telangiectasias, rhytides, age-related atrophy, hypertrichosis, phlebitis, lymph varices, etc. For their treatment, he proposed 3 types of procedure: (1) excision and repair, (2) the use of grafts, and (3) physical methods such as scarification, phototherapy, cryotherapy, electrolysis, etc. He also proposed 3 types of instrument: razors or fine scalpels, scarifiers, and various knives. He placed particular emphasis on a delicate and meticulous technique¹⁹:

In esthetic dermatologic surgery, every attention to detail merits the greatest consideration. The aim is to remove as far as possible all signs of the lesion and, using whatever techniques may be required, to return to the skin surface almost all the normal characteristics that make it one of the clear indicators of human health and beauty; and when this is performed, the care in the handling of fragile tissues in order to achieve this with the greatest cleanliness, smoothness and perfection can never be too great. For this reason, curettage must be complete, the incisions clean and accurate, with adequate antisepsis, and sutures performed with a woman’s care.

When performing an incision, he preferred the “hidden incisions, which lie within the natural folds of the skin,” and he described difficult regions, such as the upper and lateral parts of the chest and neck, as they are subject to movements of stretching and relaxation; the incisions must therefore be planned taking these subsequent tensions into account.²⁰ He was even more protracted in the section dedicated to sutures, drawing particular attention to the intradermal suture, about which he stated the following²¹:

The intradermal suture, using only the deep layers of the skin (such that the suture material remains hidden below the line of skin union), is above all of esthetic interest, and can be performed in many ways: first, the continuous suture running longitudinally along the incision; second, the transverse suture; third, the zigzag suture; and fourth, the interrupted suture.

He also mentions the use of small surgical staples, although they must be placed without excessive compression. The needles used nowadays had still not been fully developed, though “curved, semicircular needles with a very

small diameter, never more than 2 centimeters” were already being used.²² The needles, which at that time were not coupled to the suture material and had to be threaded, were sterilized and reused; however, due to their delicacy, Gimeno complained that they “often bent on the second day.” He also described the use of external retention sutures to avoid dehiscence and external fixation using adhesive tape without skin puncture as a complement to intradermal suture. Curiously, he does not discuss the suture materials, but it may be assumed that he did not stray from the traditional types, probably silk and linen.

Gimeno dedicated a large section to a review of skin flaps, which he called pedicled autoplasty grafts, and free skin grafts. He began to speak of the difficulty of heterologous grafts and even mentioned acquired and innate immunity as fundamental determinants of success or failure rather than problems of blood supply or of the surgical technique, and he says²³:

... there is astonishment on reading about the trials preformed by Professors Murphy and Morton of the Rockefeller Institute. Working with chickens, they have shown the truth of a fact that appears to go against all I have just said; that is, that any class of tissue, even human tissue, can be transplanted into a chick embryo and be accepted, as long as the spleen and lymph tissues do not grow in the chick. This leads us to suppose that resistance to grafting must be sought in the lymphocytes.

Vicente Gimeno described the greater success of flaps versus free grafts; of the free grafts, he drew particular attention to the Reverdin epidermal fragments that we still use today. He reviewed the Ollier-Thiersch technique for full thickness grafts and recommended against allografts, which were rarely successful; he disapproved of xenografts, which he considered to be “biological trials rather than therapeutic applications.”²⁴ He also mentioned grafts of fat, aponeurosis, tendon, cartilage, and muscle.

The final part of Gimeno’s speech was dedicated to a review of physical therapies, novel at that time: electricity, light, heat, and cold. He mentioned Finsen light therapy, radiation therapy, and nuclear therapy. With regard to cautery, he was clearly in favor of fine electrocautery due to the better quality of healing. Equally, he approved of the use of cryotherapy due to the quality of healing.

Anesthesia

Until a few decades ago, anesthesia was the great Cinderella of surgery. In fact, for a long time it was left in the hands of the least experienced person in the operating theater. The origins of modern anesthesia go back to 1844, when

the North American dentist William T. G. Morton began to use ether in his dental practice.²⁵ The anesthetic properties of cocaine have been known since 1884. We find only fleeting references to the use of anesthesia, mainly local anesthesia, in the Spanish dermatologic literature of the second half of the 19th century and early part of the 20th century. The first extensive explanation of the use of anesthesia in dermatologic surgery is to be found in Oyarzábal’s book *Treatment of Cutaneous and Sexually Transmitted Diseases*, which dates from 1934.²⁶ The brief section on the surgical treatment of skin diseases is almost wholly dedicated to local anesthesia, stating:

Local anesthesia is very necessary for our small operations. Ethyl chloride is particularly indicated for short operations such as the incision and drainage of abscesses or boils. This liquid, contained in glass tubes, is sprayed onto the skin; when this turns white it indicates that anesthesia has been achieved. Do not forget that ethyl chloride is highly inflammable and should therefore not be used when cautery is to be performed.

The lasting action of Schleich local anesthesia means it is widely employed, particularly if novocaine, 7 times less toxic than cocaine, is used. Its efficacy increases considerably with the addition of a few drops of epinephrine. The following solution is particularly useful:

56. Novocaine	0.25
Normal saline solution	50.0
Solution of 1:1000 epinephrine	5 drops
Mix for use in anesthesia by infiltration.	

Ready-to-use solutions of novocaine–epinephrine are extensively employed, supplied as a 0.5% solution in 25 cm³ bottles; 2% solution in boxes with × ampoules of 1 cm³, 2 cm³, or 5 cm³; or 5% solution in boxes of × ampoules of 3 cm³.

The injection is performed according to the widely known Schleich method until a small elevation, similar to a wheal, is created. Further injection is then made into this elevation. After a few minutes, the operation may begin. This local anesthesia is used extensively in the excision of certain chancres, bubos, operations for phimosis, etc.

For anesthesia of the mucosa, we can use 2% or 5% novocaine–epinephrine brushed onto the surface.

The Bridge to the Present Day

This panorama of dermatologic surgery of the third and fourth decades of the 20th century was already relatively close to current practice. Even so, it is interesting to look at the developments in Spanish dermatologic surgery after the Civil War. An important landmark was the publication

in 1955, in *Actas Dermo-Sifiliográficas*, of an extensive paper by Luis Álvarez Lowell—as may be imagined, son of Enrique Álvarez Sainz de Aja—titled “Free Grafts in Dermatology.”¹ This was a long paper, sadly lacking in illustrations, although there was a footnote from the editor that stated: “The text was accompanied by 40 photographs that have been removed from this publication due to a lack of space.”

There were also 2 interesting news items published in *Actas Dermo-Sifiliográficas* in 1957 and 1958. The first reported the official foundation of the Spanish Society of Plastic and Restorative Surgery, the first session of which took place on November 20, 1956. Luis Álvarez Lowell figured as general secretary.²⁷ The second news item stated the following²:

By order of the National Ministry of Education on June 10, 1958 (Official State Bulletin of July 26), in compliance with the provisions of the Law of Medical Specialties, and on the proposal of the Council of Deans of the Faculties of Medicine, Professor Felipe de Dulanto, Professor of Dermatology of the University of Granada, has been appointed to the Advisory Commission on Restorative Surgery.

There is no question of the importance of Professor Dulanto and of his school on the current development of Spanish dermatologic surgery, and his leadership merits special mention. But this forms part of a more recent history, to some extent still alive, and better known and explained by those who formed part of it.²⁸

I began this paper with a quote from Álvarez Lowell in *Actas Dermo-Sifiliográficas*. I shall finish with another quote from the same author and from the same paper¹:

If we are dermatologists, the volume of general diseases seen in our specialty means we should be physicians to the whole body—not only of the surface of the skin (*topiqueros*, those who apply topical treatments), but of the whole thickness of the skin, and, even more, of the skin as an organ considered as a ‘pathophysiologic unit’. That is, dermatologists in the holistic sense, with all its consequences. And one of these consequences, when referring to therapy, is not to reject dermatologic surgery.

References

1. Álvarez Lowell L. Injertos libres en dermatología. *Actas Dermosifiliogr.* 1955;46:411-24.
2. Noticias y comentarios. *Actas Dermosifiliogr.* 1958;49:567-8.
3. López Piñero JM. *Historia de la Medicina.* Madrid: Alba libros; 2005. p. 124.
4. Crissey JT, Parish LC, Holubar K. *Historial atlas on dermatology and dermatologist.* New Cork: Parthenon Publishing Group; 2002. p. 14.
5. Ferrer D. De la unión del estudio de la Medicina y la Cirugía. *Medicina e Historia;* 1966, fascículo XXIV.
6. García Pérez A, del Río de la Torre E. Los orígenes de la enseñanza de la Dermatología en España. *Actas Dermosifiliogr.* 1997;88:421-33.
7. López Piñero JM. op. cit. p. 197-8.
8. Gallardo P. Un caso de autoplastia del carrillo. *Anfiteatro Anatómico Español.* 1875;3:411-3.
9. Fernández de la Vega. El Dr. José Eugenio Olavide. *Anfiteatro Anatómico Español.* 1874;2:5-7.
10. Del Río de la Torre E. Los orígenes de la escuela madrileña de dermatología. Doctoral thesis. Madrid: Universidad Complutense; 1996. p. 118.
11. López Piñero JM. op. cit. p. 198.
12. Azúa J. Dermatitis profesionales por el lavado. *Revista de Medicina y Cirugía Prácticas.* 1898;43:344-6.
13. Del Río de la Torre E. op. cit. p. 194-7.
14. Del Río de la Torre E. op. cit. p. 347-52.
15. Gay Prieto J. Acta de la sesión necrológica celebrada el día 16 de junio de 1965 en Memoria de los Dres. Enrique Álvarez Sainz de Aja y Xavier Vilanova Montiu. *Actas Dermosifiliogr.* 1965;54:221-31.
16. Matilla V. 202 biografías académicas. Madrid: Real Academia Nacional de Medicina; 1987. p. 185-7.
17. Gimeno y Rodríguez-Jaén V. Algo de cirugía estética de la piel. *Real Academia Nacional de Medicina.* Madrid; 1923.
18. *Ibid* p. 14.
19. *Ibid* p. 24.
20. *Ibid* p. 27.
21. *Ibid* p. 30.
22. *Ibid* p. 35.
23. *Ibid* p. 45.
24. *Ibid* p. 51.
25. López Piñero JM. op. cit. p. 127.
26. De Oyarzábal E. Tratamiento de las enfermedades de la piel y sexuales. Madrid: Manuel Marín, G. Campo, eds; 1934. p. 67-8.
27. Noticias y Comentarios. *Actas Dermosifiliogr.* 1957;48:77.
28. Camacho F. Historia de la cirugía dermatológica. Situación actual. In: Camacho F, de Dulanto F, eds. *Cirugía Dermatológica.* Madrid: Aula Médica; 1995.