History article

When the surgeon was recognized as a physician

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During the viceregal era and until the first third of the 19th century, medicine and surgery were separate disciplines in practice. While the former was a scientific activity whose teaching was limited exclusively to the precincts of the university, the latter was considered as «the art of healing with the hands» and remained as part of the technical and manual activities.

Most of those who practiced this profession were the so called Romancist surgeons, i.e., those who had received no academic instruction, but were trained in the guilds beside a graduated surgeon, who supervised their practice for a four-year period. The so called Latins were a minority; they had studied several medical subjects in Latin at the university.

It was not until the last third of the 18th century that, with the incorporation and adaptation of the illustrated ideas, a process of renewal and transformation of surgery in New Spain began. In 1764 Antonio Arroyo, manager of the Hospital de Naturales (Hospital for the Natives), with the support of the medico-surgical team at the hospital, submitted to the viceregal authorities a proposal that resulted in the creation of the Royal College of Surgery, established as per the royal decree of March 17, 1768, with the purpose of instructing the surgeons in New Spain, similar to the colleges in Cadiz and Barcelona. The college began its activities in February of 1770 and, as per a proclamation of the viceroy Marquis de Croix of April 10 of the same year, it became the only institution authorized to instruct the surgeons in the viceroyalty. As of that date, no surgeon could be examined by the Protomedicato Court nor practice the profession without showing a certificate issued by the head of the school, certifying that he had completed four years of training.

The life of the College of Surgery was not easy at all, but throughout its more than six decades of life and under the command of five different directors, it fulfilled its teaching and scientific mission. It was headed by two practitioners:

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the director and first professor, and the dissector and second professor, both of whom were in charge of the instruction of the future surgeons, together with one of the physicians at the *Hospital de Naturales*, who taught physiology.¹

At the beginning, the surgeons who graduated from the College were romancists, since to enroll they only had to meet the requirements of being between 15 and 20 years old; proving they had clean blood, which meant being legitimate children of a legitimate marriage and belonging to a family of old Christians; having regular customs and education, and knowing how to read and write. They also had to have the support of someone responsible for «properly supporting them throughout the duration of their studies and providing them with the books and instruments» needed for their training.² In case one of the students showed a discreditable behavior or did not show an appropriate performance during the lessons, he could be expelled from the College. As of 1803, the director, Antonio Serrano, requested that applicants present a certificate of Latin studies. Moreover, many students of medical school at the university completed surgical studies, so many of the graduates were Latin surgeons.

The courses were free until 1819, but as a result of the economic problems due to the bellicose status prevailing in the territory, the institution had to seek new resources to subsist. Thus, as of 1820, all those who enrolled had to pay several fees: 20 reals for enrollment; 8 reals for the certificates issued; and similar amounts during the first three years for the purchase of teaching materials and utensils.³

The instruction consisted of four years during which the following subjects were taught: from October to late February, or later if necessary, the director and the dissector delivered «Practical Anatomy» and surgical «Operations». Due to the limited academic staff, the anatomy chair included lessons on osteology, arthrology, myology, angiology and, possibly, neurology and splanchnology. In surgical operations the students were taught how to place bandages and they practiced suture placement; this subject also comprised surgical pathology studies and cadaver surgeries.

The third chair was physiology, delivered from March to May; the fourth one was «clinic». In the latter, the students would attend, together with practitioners at the *Hospital de Naturales*, or at the hospital to which they had been assigned, the rounds during which they observed how patients were attended and participated in their healing process. As of 1789, the chair on «botany», based in the Royal Botanic Garden, was added.⁴

At the end of each school year, the students had to take an exam in which they were rated with the grades «poor», «medium», «good» and «outstanding», according to the skills shown during the surgical practice.

The Royal College of Surgery represented the institutionalization of surgical education through the combination of a theoretical education with the practice carried out to a great extent at the *Hospital de Naturales*, as well as in other hospital facilities in the capital of New Spain.

Since its curriculum was based on the most advanced surgical trends at that time, it not only trained its graduates to acquire a new and better academic and professional rank, but it also brought to the discussion table the backwardness of medical education at the Royal and Pontifical University, which followed the Hippocratic-Galenic humoral model.⁵ This led, on the one hand, to the first steps towards the approach of medicine and surgery.

This was shown by various facts, e.g. when personalities like the famous Ignacio Bartolache or Jose Antonio Giral, professor of surgery and anatomy at the medical school, defended the functionality of the College of Surgery and the usefulness of its courses and urged medical students to attend the anatomical demonstrations conducted there. The latter happened and this is reflected in the fact that most of the professors at the Medical Sciences Establishment had been trained in both disciplines, medicine and surgery.

After the independence, the medical and the surgical practices continued to get closer. However, the unsettled political and economic situation affecting the nascent nation did not facilitate things nor allowed to achieve the former immediately. The physicians and surgeons remained interested in undertaking the reforms needed to update their respective practices, which also meant unifying them in a single science, as it was already occurring in the European nations. Likewise, the independent governments considered, among the reforms undertaken, those concerning the development of science and education as a means to configure the strong nation they desired.

Antonio Serrano, then Director of the National School of Surgery, in a letter sent to the Emperor of Mexico, Agustin de Iturbide, included an instruction on how interesting surgery was and proposed a curriculum aimed at achieving the reform of the school to establish the College of Medical Surgery.⁶

Antonio Serrano, together with Juan Valenchana, professor at the Medical School, was part of the commission for reviewing and discussing the status of the existing education facilities in the country's capital and preparing a Public Instruction project that allowed modernizing the studies delivered therein. Regarding medicine and surgery, they referred to an integral school where the graduates in both disciplines are trained through a curriculum that left out completely the Hippocratic-Galenic model and was based on the theoretical-practical education. Unfortunately, due to the economic difficulties in the country, such a curriculum was never implemented.⁷

In the political field, in May of 1823 Jose Miguel Muñoz, surgeon and congressman, submitted a project to the Congress Public Instruction Commission aimed at joining medicine and surgery in a single discipline and modifying their curricula by establishing «Colleges of Medical Studies». The «surgical-medical scientists» would be trained in such establishments based on a modern curriculum emphasizing the advantages of the anatomo-physiologic medicine, and completely ruling out humoral medicine, and including both theoretical and practical studies, like the ones already offered at the National School of Surgery.⁸

Muñoz also proposed to replace the old Protomedicato Court with a Public Health Council involving the participation of members of the three schools, medicine, surgery and botany, who would be responsible not only of preparing the curriculum of the new medico-surgical colleges, but also of controlling the practice of this profession and of botany. The Protomedicato Court opposed such project. Although it was starting to accept the reform of medical studies, it did not like the idea of having to share its power over the control of the medical professions with surgeons and botanists.

The disturbed situation of the country and the lack of capital were the major obstacles that prevented the implementation of the reform projects of the medico-surgical studies and practice.

Later, in 1830, Lucas Alamán, Secretary of State and of the Office of Domestic and Foreign Affairs, promoted a curriculum that already referred to the studies of medical science that would be offered at *Colegio de San Juan de Letrán*.⁹

The disturbed situation of the country and the lack of capital were the major obstacles that prevented the implementation of the medico-surgical studies and practice reform projects. It was not until 1833, under the government of Valentín Gómez Farías, that the educational reform was enacted and, with it, the medico-surgical studies reform. After the closing of the university on October 18, 1833, the Directorate General for Public Instruction was created. It was responsible for the six public instruction establishments, which included the one on Medical Sciences. This new institution gathered in a single entity what until then had been the National School of Surgery and the University School of Medicine, which meant the union of both disciplines, of theory and practice.

By October 23rd the Establishment had been definitely formed; its board of directors and faculty were appointed. The former was composed of Dr. Casimiro Liceaga, Director; Dr. José María Benítez, Vice-director; surgeon Pedro Escobedo, Secretary, and Dr. José María Vargas, Treasurer. The professors of the various subjects included in the establishment's curriculum were as follows: Anatomy, Doctors Guillermo Cheyne and Salvador Rendón; Physiology and Hygiene, Dr. Manuel Carpio; Internal and External Pathology, Doctors Ignacio Erazo and Pedro Escobedo; Internal Clinic, Dr. Francisco Rodríguez Puebla; External Clinic, Dr.

Ignacio Torres; Operations and Obstetrics, Pedro del Villar; Medical Matter, Isidoro Olvera; Legal Medicine, Agustín Arellano, and Pharmacy, José María Vargas.

This new institution gathered in a new entity what until then had been the National School of Surgery and the Medical School at the National and Pontifical University of Mexico, thus achieving the union of both disciplines, of theory and practice. This is how the career of physician-surgeon was created.

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