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Dr. Ricardo Suárez Gamboa, innovative surgeon and promoter of uterine cancer management in the 19th century

Dr. Ricardo Suárez Gamboa, cirujano innovador y promotor del manejo del cáncer uterino en el siglo XIX

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Palabras clave: cirugía, historia,

cirugía, historia, cervicouterino, alambre, sutura, militar.

ABSTRACT

Dr. Ricardo Suárez Gamboa (1872-1915) was a surgeon of the late 19th century who studied medicine at the then National School of Medicine in Porfirio's Mexico; he studied in France with Pozzi and Routier. Upon his return, he edited the book *Monografias de clínica quirúrgica* in 1899, where he suggested using a four-grade classification of cervical cancer. He was the first promoter of the fight against this disease. He was a member of the National Academy of Medicine, publishing articles supporting metal sutures, asepsis, and approaches with radical lymphatic repair and emptying in cancer cases. He was among the first to use Walter Reed's theories to control yellow fever in the battle of Ebony, where he died.

RESUMEN

El Dr. Ricardo Suárez Gamboa (1872-1915) fue un cirujano de finales del siglo XIX que estudió medicina en la entonces Escuela Nacional de Medicina en el México porfirista; estudió en Francia al lado de Pozzi y Routier. A su regreso editó el libro Monografías de clínica quirúrgica en 1899, donde sugirió el uso de una clasificación en cuatro grados del cáncer cervicouterino, y fue el primer promotor en el mundo de la lucha contra este mal. Fue miembro de la Academia Nacional de Medicina, publicando artículos que apoyaban la sutura de metal, la asepsia y los abordajes con reparación y vaciamiento linfático radicales en los casos de cáncer. Fue de los primeros en usar las teorías de Walter Reed para el control de la fiebre amarilla en la batalla de El Ébano, donde murió.

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INTRODUCTION

A ccording to Jürgen Thorwald, the 19th century was called the era of surgeons due to the extraordinary achievements in this branch of medicine, mainly thanks to the beginning of anesthesiology, as well as asepsis and antisepsis; ¹ in Mexico, thanks to the contributions of the anatomists from the Royal School of Surgery of Mexico, as well as to the knowledge of Spanish, German and French surgery, a first generation of surgeons was forged in the country that responded to the current needs. ^{2,3} The next generation, after the war against the United States in

1847, modified and incorporated the new knowledge and began to generate ideas and proposals independent of the European continent.⁴ One of these physicians who realized the phenomena that afflicted a large part of the population, especially women, was Dr. Ricardo Suarez Gamboa, who, thanks to his surgical mentors, developed not only a surgical skill but a facility and sensitivity in the area of gynecology, in which he would be part of the founders of that specialty, with an unfortunate but heroic premature death.

We aim to highlight the surgical and editorial achievements of this late 19th and early 20th-

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century physician who also participated in the Mexican Revolution.

PREPARATION AND PROFESSIONAL LIFE

He was a military doctor of the XIX century born in 1872 and was wounded in the battle of El Ébano, in San Luis Potosí, in 1915.⁵ He entered the National School of Medicine in 1886 (*Figure 1*). When he finished, he traveled to Europe to perfect his studies with Dr. Samuel J. de Pozzi (1846-1918), from whom he inherited his taste for gynecology, and with Dr. Routier at Necker Hospital.⁶ Upon returning to his homeland, he competed for and won the Chair of Operative Medicine at the National School of Medicine in Mexico.⁷

On April 30, 1900, he participated in a competitive examination for a professor of medicine, summoned by the Ministry of Public Instruction, competing, among others, with Aureliano Urrutia (1872-1975), Rafael Norma, and Julián Villarreal (1869-1934), the president of the jury being Dr. Francisco de P. Chacón (1840-1904).⁸ According to his file

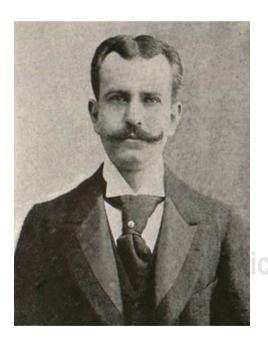


Figure 1: Dr. Ricardo Suárez Gamboa. Existing photo in his monograph.

Taken from: Suárez-Gamboa R, p. 25.¹²

from the then National School of Medicine, he entered, supported by Dr. Francisco P. Chacón (mentor during all his undergraduate studies) to the National Academy of Medicine, and it is interesting that he mentions suffering from asthma in his documents.

CONTRIBUTIONS TO GYNECOLOGY

Dr. Suarez Gamboa was one of the first to practice hysterectomy in our country;9 and according to Dr. Uribe-Elias, he is one of the surgeons who gave the transition between the old management of gynecology of the nineteenth century to that of the twentieth century.¹⁰ In his book, he describes the history of how this procedure evolved in Europe from the "amputation" of the uterus that was resected when it presented a type IV prolapse, with the clamping of the entire block above the fundus of the uterus and suturing, assigning this technique to Francois Rousset (1525-1598), also attempted by other means by Halscher, Bernhard Rudolf Konrad von Langenbeck (1810-1887), Van Heer and Sauter de Constance (French surgeon at the beginning of the 19th century). 11 Of the latter surgeon, Suarez Gamboa describes (without giving the date) that he attempted dissection of the uterus with a three-stage resection with dissection of the lateral structures, clamping of the adnexa, and dissection of the so-called vaginal insertion, which he describes as being more complex. Suarez Gamboa gives the priority of successful resection of the uterus to Oslander and Urisberg by formalizing the socalled "amputation of the womb", but with few successes between 1828 and 1851, in which an abdominal hysterectomy with ligation was performed, but we do not find mention of the suture of the vaginal vault or the suture of the parametric, an intravaginal sponge was placed; Our author describes how surgeons in that era found bleeding from the abdominal cavity at autopsy; he comments that the breaking point was with Keimball in 1855, Koeberlé in 1863 and of course with Pean in 1869, who treated the pedicle with metallic ligature instead of ligature with threads. In Mexico, he laments the obscure and scarce medical articles to support it; he only mentions as national antecedents

his teachers Rafael Lavista (he introduced hysterectomy on March 22, 1878, based on Dr. Pean), Francisco P. Chacón and Nicolás San Juan (first vaginal hysterectomy in our country on February 13, 1873). 12

PUBLISHED WORKS

Suárez Gamboa published in the Gaceta Médica de México about several topics: 1) Tropical medicine, in which he commented on the control of the military doctors headed by Dr. Walter Reed (1851-1902) in Havana to control yellow fever (he asked for a commission to see how this control was done in that Cuban city so that it could be implemented in Veracruz);¹³ 15 years later he would implement the epidemiological and logistical measures of control in the battle of El Ébano.⁵ 2) History of algology, making a historical compilation of the methods used from Pliny to the 19th century. 14,15 3) General surgery, an example of this topic, is an interesting work in which he reaffirms the use of metal sutures (silver and aluminum bronze), emphasizing its low risk of infection (he comments that in the market at that time, there was only metal wire, Florentine horsehair [made from the sericogenous glands of the silkworm, monofilament], braided silk and catgut);⁶ in another paper he describes preoperative psychiatric states, emphasizing that not only infections are adverse sequelae of an operative act, which, although he discusses them within the preoperative preparation in each case in his book on hysterectomy, he emphasizes in this article on such perioperative problem, calling it psycho-neurosis-surgical.¹⁶ His last surgical article described a technique for approaching and closing the thorax in the face of a drained pleural abscess, with flap closure and rib repair when facing and aligning these processes with wire.¹⁷

Suárez Gamboa was one of the young surgeons who modernized gynecology and obstetrics practice at the end of the Porfiriato period; in 1899, he published a study on hysterectomy, ¹² incorporating steel as a suture to the Mexican surgical arsenal. ¹⁰ In that writing, his teacher Joaquin Vertiz made the introduction, noting that it was an important work by "how little Mexican doctors do to

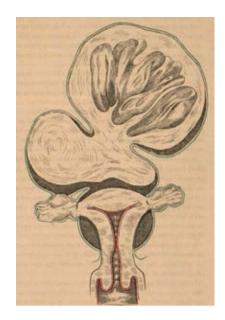


Figure 2: Pathological specimen described as fibrosarcoma of the uterus.

Taken from: Suárez-Gamboa R, p. 77.¹²

transmit their experience, removing selfishness, being so little the public that reads and so grown in the proportion that criticizes and hurts"; another introduction was written by Dr. Francisco de P. Chacon who qualifies it as original work, which gives contributions to the world surgery regarding uterine surgery. The same author, in his preamble, describes that he was helped by surgeons Numa Torrea, Arcadio T. Ojeda, Carlos Manuel García, Manuel M. Macias (from Veracruz), German Díaz Lombardo, Antonio A. Loaeza, Ricardo Tapia Fernández, Francisco Carral, Marcos E. Juarez, Jesus Valdes Sanchez, Calixto Vargas, Manuel Ortiz, Alfonso Montenegro, Felipe Ruiz Esparza and Reinaldo Deffis (surgeons of whom we do not know more data, but it would be interesting to explore their achievements around our character). Mr. Alberto Fernández made illustrations of oncological pieces.¹⁸ The work Monografías de clínica quirúrgica even reached Merida, Oaxaca and Monterrey, where it was preserved in their respective medical school libraries.¹⁹ When reviewing the book and the illustrations, one can appreciate the perfection of the technique when resecting the uterus with fibrosarcomas (Figure 2), cervical



Figure 3: Pathological specimen described as cervical and parenchymal cancer.

Taken from: Suárez-Gamboa R, p. 121.¹²

and parenchymal cancer (Figure 3), cervical and medullary cancer (Figure 4), in general physically gathered in his anatomopathological museum, located in the study of his private home (Figure 5).

From page 106 onwards of his book, he described how the changes of uterine cancer are "essentially limited to the uterine cervix, preferably starting from the paracervical mucosa, from there it passes to the perimetric tissue, bladder, rectum and connective tissue of the pelvis", a masterful description of an extensive invasion of the pelvis. The thought of Suárez Gamboa that carcinoma is a secondary process to a chronic cellular process (which could not be proved in that era), but that, at the end of the 19th century, it was located by a parasitic origin with greater frequency in women of 40 years of age according to Gusserow, is another of his contributions.²⁰ He emphasizes, at several points in his book, the probability that the uterus, in the presence of cancer, is free to be resected from the bladder and rectum, criteria for which he does not proceed to perform a hysterectomy. In his thesis, Hernández Cornejo emphasizes how Suárez Gamboa is the first Mexican surgeon

to establish defined behaviors in the face of cervical cancer, ²¹ establishing a classification, which covers pages 128 to 129 (*Table 1*), which places him very close to evidence-based medicine, as well as perhaps being the first surgeon in the world to make such a proposal, as stated by Conrado Zuckermann.²²

In the same monograph, he describes that he operated in the then-private hospitals

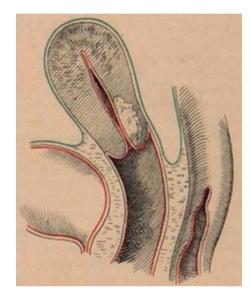


Figure 4: Pathologic specimen described as medullary uterine cancer.

Taken from: Suárez-Gamboa R, p. 137.¹²

Figure 5: Personal anatomopathological museum, existing in Dr. Suárez Gamboa's house at the time. Taken from: Suárez-Gamboa R, p. 16.¹²

Table 1: Classification Dr. Ricardo García Gamboa proposed for managing cervical cancer in 1899.			
Category	Anatomical criteria	Technique	Remarks
1ª	Limited to the neck	Supravaginal amputation	He does not advocate the transvaginal resection method
2ª	Destruction of the cervical os, cervical vagina hard and thick, healthy fundus	Abdominal hysterectomy	Trendelenburg position and wide laparotomy preferred
3 ^a	Uterus fully grasped but mobile; broad ligaments, bladder, and rectum free	Abdominal hysterectomy plus pelvic node emptying	Lymph nodes are palpated in the pelvis
4 ^a	Immotile uterus, vaginal wall invasion, bladder, or rectum taken	If inoperable, do not perform resections	Palliative management

Concepción Beistegui (directed by Dr. Javier Hoyo) and Hospital Morelos, where an "aseptic operating room" was opened (directed by Dr. Ramón Macias). ¹⁸

MILITARY LIFE

He was discharged from the Mexican Army, and in his book Monografías de clínica quirúrgica, he appears in the presentation as Ex-Mayor Médico-Cirujano del Ejército Nacional, indicating that by the year 1899, he was no longer incorporated to the Health Service. 18 In his second period as a military doctor, Suárez Gamboa helped to organize the Military Health Service of the Constitutionalist Army of Venustiano Carranza; together with Jesús Alemán Pérez,²³ Suárez Gamboa accompanied in the second part of the revolution, the troops of General Pablo González and his division (Army Corps) of the northeast, as well as in the battles where Piedras Negras, Coahuila, was lost around September 29, 1913;²⁴ In November 1914 he was chief of the Carranza's Medical Corps that moved to Jiménez, Tamaulipas, to organize a Blood Hospital²⁵ until his last act of arms in the battle of El Ébano, 5 where he died attending the wounded in the line of fire; 26 should not surprise us, since the rear line in El Chijol, Dr. Salvador Aguirre López also died because of

his outstanding work in the battle of El Chijol. Salvador Aguirre López was also killed by a grenade that exploded beside him.²⁷ As an additional note, his widow Mrs. Isabel Torres, was pensioned on December 28, 1934, with five pesos daily.²⁸

CONCLUSIONS

Our previous experience regarding the hospital trains of the Mexican Revolution and the battle of El Ébano allowed us to approach the existence of Dr. Ricardo Suárez-Gamboa, who passed away tragically. Ricardo Suárez-Gamboa, who died tragically, without forgetting his value as one of the initiators of the specialty of gynecology in our country, ¹⁰ is considered a surgeon who gave the turn to surgical modernity for being the first Mexican doctor to propose a classification of cervical cancer, in order to take a criterion of operative conduct, and initiating the use of metal sutures in our country, among other contributions.

For all of the above, he remains a medical hero of the Mexican Revolution and an indispensable character who gave scientific elements of the transcendence of cancer of the reproductive system in women. This campaign would be formalized more than 90 years after his death.

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