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Juan Evangelista Manrique, the true pioneer of spinal anesthesia in Colombia

El verdadero pionero de la raquianestesia en Colombia: Juan Evangelista Manrique

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Abstract

Several findings paved the way to the use of the spinal approach for anesthesia. Information about the originators and dates of their discoveries is controversial. According to personal communications, doctors Juan Bautista Montoya y Flórez, in Medellín, and Lisandro Leyva, in Bogotá, in 1904 and 1905 respectively, would appear to be the pioneers of spinal anesthesia in Colombia. Pioneering cases of this procedure carried out in 1901 by doctor Juan Evangelista Manrique and which continued to be performed by his colleagues and assistants of the medical community at the time are documented in the Corporis Fabrica dissertation collection of the National University of Colombia.

Keywords

History of medicine; spinal anesthesia; Colombia; academic dissertations; local anesthetics.

Resumen

Son varios los hallazgos que contribuyeron al abordaje de la columna vertebral como vía para la administración de anestesia. Los autores y las fechas de tales descubrimientos han sido controvertidos. En Colombia, según fuentes orales, los doctores Juan Bautista Montoya y Flórez, en Medellín, y Lisandro Leyva, en Bogotá, en 1904 y 1905 respectivamente, serían los pioneros de la anestesia raquídea en Colombia. En las tesis de la Facultad de Medicina de la Universidad Nacional, Colección Corporis Fabrica, se documentan los casos pioneros de este procedimiento realizados en 1901, por el doctor Juan Evangelista Manrique y continuados enseguida por sus colegas y ayudantes de la comunidad médica de ese entonces.

Palabras clave

Historia de la medicina; anestesia raquídea; Colombia; tesis académica; anestésicos locales.

The spinal block was the first important regional technique introduced in the practice of anesthesia and its discovery is undoubtedly a landmark in the history of the specialty.

The main historians of anesthesia in Colombia attribute the introduction of spinal anesthesia to Juan Bautista Montoya y Flórez, in Medellín, in 1904, and to Lisandro Leiva, in Bogotá, in 1905 (1,2). As relates to the primacy of this procedure in this country, Jaime Herrera Pontón, in his book "Anesthesia in Colombia" (La anestesia en Colombia), wrote: "In 1905, doctor Lisandro Leiva, at the San José Hospital, performed the first spinal anesthesia procedures using tutocaine" (2). This assertion is based particularly on personal communications, in particular an interview with doctor Juan Ramón Marín (2). In his book "Pioneers" (Pioneros), Bernardo Ocampo mentions the same reference but states his concern for the lack of reliable sources on which to base many historical events of anesthesia in Colombia with any degree of certainty and proposes a rigorous search (3).

In the absence of better sources, Lisandro Leiva's primacy has prevailed to this date. The study of recently retrieved and classified dissertations on spinal anesthesia written in the early twentieth century has provided authoritative evidence to unveil the true origins of that procedure in our country and to claim legitimate authorship.

Very relevant to this article is the historical statutory requirement that was in place in the National University Medical School between 1874 and 1954 of writing a dissertation in order to be granted the title of Doctor in Medicine and Surgery (4). Close to 3,055 dissertations were produced which then fell into oblivion for many years. However, thanks to the work of doctoral history student Herley Aguirre, they were retrieved and classified into the *Corporis Fabrica* collection.

Out of nearly 140 dissertations on the subject of anesthesia, 31, written between 1902 and 1954, were devoted to spinal anesthesia. The vast majority are kept in the Central Library of the National University Campus in Bogotá while others are in different repositories in the country (Table 1). These are exceptional sources of information regarding the evolution

TABLE 1. Spinal anesthesia in the *Corporis Fabrica* dissertations.

Year	Title	Author
1902	Cocaine-based spinal anesthesia	Cómez S., Enrique
1906	Epidural injections and some of their therapeutic applications	Uribe, José Ignacio
1908	Stovaine-based spinal anesthesia	Salcedo, Luis
1913	Novocaine-based spinal anesthesia	Salazar G., Dionisio
1925	Spinal anesthesia with sincaine	Prado, Rafael
1926	Extradural anesthesia	Reyes, Enrique S.
1927	Spinal anesthesia in abdominal surgery	Anzola Cubides, Hernando Severo
1927	Regional anesthesia in prostatectomy	Reyes Moreno, Sergio
1928	Considerations on the therapeutic action of spinal anesthesia in bowel perforation in dynamic ileus and strangulated hernia	Casas M., Pablo E.
1929	Contribution to the study of anal fistulas and their treatment with caudal and sacral anesthesia	Quintero Muñoz, Francisco
1930	Spinal analgesia	Triana Cortés, Santiago
1932	Considerations on limitable spinal anesthesia	Pérez Castro, Gustavo
1934	Action of spinal anesthesia on pregnant uterus contractility	Suárez Restrepo, Alberto
1940	Cerebrospinal fluid exploration applied to surgical pathology and spinal anesthesia	Guarín Porras, Reinaldo
1943	Generalized spinal analgesia	Gutiérrez Reyes, Alfonso
1944	Continuous caudal analgesia in the obstetric practice	Cristo Saldívar, Jorge S.
1944	Simple and continuous caudal analgesia. Surgical and obstetrical applications	Velásquez Palau, Gabriel
1945	Spinal anesthesia in epilepsy. Work conducted in the women's asylum in Bogota	Azuero Villamizar, Ricardo
1945	Continuous spinal anesthesia with fractionated anesthesia	Caycedo Echeverría, José
1946	One-thousand seven-hundred and seventy-four spinal anesthetics at La Samaritana Hospital	Murillo Rivera, Fabio
1949	Prolonged spinal anesthesia with the use of intrathecal neo-synephrine	Rocha C., Dagoberto J.
1949	Upper spinal anesthesia and sodium pentothal in supraumbilical abdominal interventions	Delgado Sierra, Gustavo
1950	Caudal analgesia and sacral block in perineal surgery	Amaya Galarza, Alberto
1950	Observations on spinal anesthesia in acute surgical abdominal syndromes	Mojica M., Hugo B.
1950	Saddle block in obstetric practice	Rodríguez Pedraza, Miguel A.
1951	Continuous spinal anesthesia in surgery	Molina Vásquez, Alejandro
1952	Epidural block in the treatment of tropical ulcer	de los Ríos Gartner, Mario
1952	Thiamine-enhanced spinal anesthesia	Demner Tepper, Sigfrido
1953	Spinal anesthesia and analgesia in obstetrics	Angulo Rodríguez, Luis M.
1953	Saddle block. A basic behavior in obstetrics	Gómez Palacino, Jesús Alberto
1954	Caudal anesthesia during childbirth, using procaine and sodium bicarbonate	Orejuela Bueno, Raúl

SOURCE: Authors, from the collection of dissertations on the topic of anesthesia.

and history of medicine in Colombia and, for purposes of this article, regarding the precedence of spinal anesthesia.

Despite some opposing views, it is generally accepted that it was on the 16th of August, 1898, at the Royal Surgical Clinic of the University of Kiel in Germany, that August Bier gave the first spinal anesthesia using 15 mg of cocaine for the resection a tubercular joint lesion in the left ankle (5). The procedure was replicated successfully in another six patients between August 16 and 27 of the same year; also, Bier and his assistant experimented on themselves on August 24 (6). It is interesting to note that Tuffier was deemed to have discovered spinal anesthesia at the time, considering that Bier had rejected the technique on the grounds of its unpleasant effects, similar to those of chloroform (7).

In 1902, in his dissertation entitled "Cocaine-based spinal anesthesia," Enrique Gómez, after describing the history of spinal anesthesia and its precursors in the world, provides an accurate description of the first spinal anesthesia in a paragraph that is quoted verbatim, given its historical importance:

"In our setting, doctor Juan E. Manrique used this approach for the first time on March 30, 1901, in a female patient considered very sensitive to chloroform as she had exhibited cardiac asthenia on previous occasions. Anesthesia was given to resect the ulcerated, condylomatous and varicose ano-rectal mucosa, with a successful outcome." (8)

Apart from the five initial cases by doctor Manrique, close to twenty additional cases are presented, performed by colleagues who assisted him during the first interventions and who went on to incorporate the technique into their practices. On June 10, 1901, doctor Zoilo Cuellar Duran reported the first spinal anesthesia given after the initial cases described by doctor Manrique.

In the light of this document, there is no doubt that spinal anesthesia was first administered in Colombia by doctor Juan Evangelista Manrique. The technique was then successfully replicated by several professors at the time, among them Pompilio Martínez and Gómez Cuellar (8).

Several facts support the veracity of

this statement: temporal proximity of the relevant historical events: Bier, August 14, 1898, Tuffier, November 9, 1899, Manrique, March 30, 1901, as well as the dissertation prepared in 1902. Added to this is the circumstance that the thesis student had been gathering cases performed until that time and could obtain information directly from the actual players, some of them being part of the faculty at the time.

Doctor Juan Evangelista Manrique was born in La Herrera estate, close to Bojacá, on March 6, 1861. After completing his medical studies at the National University in 1882, he traveled to Paris where he received the laureate thesis award. Back in Colombia, he joined the ranks of National University and the San Juan de Dios Hospital where he contributed to the advancement of surgery, in particular gynecological surgery. His most outstanding accomplishments include the creation of the Medical Club and the Surgical Society. He was also the driving force behind the San José Hospital. He returned to Paris as Colombia's Minister Plenipotentiary to the French government. He died in 1914 in the city of San Sebastian. Remembered among his friends are Rufino José Cuervo and José Asunción Silva. It was on the latter's chest, where obliging the request of the poet, he jokingly and unknowingly marked the location of the heart where, on the following day, his friend would lodge the bullet that claimed his life.

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Authors' contributions

PJH: Study planning, initial drafting of the manuscript and data gathering.

HAS: Dissertation classification. Filing. Study planning and data gathering.

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Conflict of interest

The authors have no disclosures to make.

Presentations

No presentations have been in relation to the topic of this paper.

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