

Joaquín Albarrán (1860–1912), the gifted promise

BY JAVIER ANGULO AND JONATHAN CHARLES GODDARD

In this series of articles, I am going to show you some of the exhibits contained in the Museum of Urology, hosted on the BAUS website (www.baus.org.uk). Does the name Joaquín Albarrán mean anything to you? Maybe you remember using an Albarrán lever on a cystoscope to help direct your guidewire into a ureter? When I ask trainees about Albarrán, some have heard the name, some give me the standard, “Ah yes, he was a nineteenth century surgeon from ...” from where? France? Spain? Even those familiar with the work of Joaquín Albarrán sometimes stumble with that, and for good reason. This month, I have, once again, asked my Spanish friend and medical history colleague, Professor Javier Angulo to explain.

Son of a Creole aristocrat and an Andalusian doctor who turned into a sugar cane businessman, Joaquín Albarrán Domínguez (1860–1912), was born in Sagua La Grande, into a wealthy family that, like so many others in the Spanish oligarchy, had decided to make their fortune in the overseas territory of Cuba. Joaquín lost his mother at the age of two, and his father at the age of four. His godfather and executor, surgeon and businessman Joaquín Fábregas from Barcelona, provided Joaquín with an early education with the Jesuits in Havana. Joaquín showed signs of being gifted, so his godfather made the decision for Joaquín to go to Barcelona in July 1872 to complete high school before entering the prestigious faculty of medicine in that city. His older brother Pedro, who was about to enter the university, also moved with Joaquín to Barcelona and preceded him into the medical school. Although there were still a few years left before the start of the Spanish-American War (1898) for the commercial control of Cuba, the student revolts were very serious in La Habana and many wealthy families had chosen to send their children abroad. In the case of Joaquín, his godfather wanted to achieve the maximum development of the capabilities that were already visible in this boy.

In 1873 Joaquín obtained his Bachelor in Art and in 1877 his medical degree, at the age of 17. His professors advised him to get his doctorate in Madrid, where he moved and made friends with another young investigator who was later awarded the Nobel Prize, Santiago Ramón y Cajal (1852–1934). In 1878 Joaquín got an extraordinary doctoral award with his thesis on ‘The contagiousness of phthisis’, a well-conducted experimental study on how and when pulmonary tuberculosis could be contracted, together with the most recent bibliographical update on the topic. Most likely, this scientific contribution was the gate of access of this dreadful disease to his body, the white death that declared on him three decades later and took his life in 1912 at the age of 51. Despite his short life, he fulfilled many achievements including having a family; he was married twice. Although qualified at only 18, he could not practise for four years, according to Spanish legislation, so his only option was to improve his education. Albarrán had intended to move to



Figure 1: Joaquín Albarrán y Domínguez in 1902.

Berlin but, following his brother, stopped in Paris and met the personalities he had reviewed in his doctoral thesis. There, under the influence of the histologist Louis Antoine Ranvier (1835–1922), Joaquín decided to learn French and study medicine again in University René Descartes. His older brother preferred to go back to Cuba. Here started the medical career of Joaquín Albarrán (Figure 1).

After several prizes and recognitions, he entered the service of Professor Jean-Casimir-Felix Guyon (1831–1920) as a fourth-year internship in 1888. This patron initiated a close relation with his exceptional pupil, who became doctor for a second time in Paris with his thesis ‘Étude sur le rein des urinaires’ in which he discovered the pyogenic germ (later named *E. coli*) that

caused pyelonephritis and death in so many postoperative patients. This anatomic and clinical work was based on autopsy findings and the experimental demonstration of the ascending infection, and included watercolours made by himself to illustrate it (Figure 2). In 1890, he finished his internship and was forced to change his nationality to get access to university positions and to practise medicine in France. His first book *Les Tumeurs de la Vessie* was published in 1890 and was acclaimed by Professor Guyon and other international leaders, including Maximilian Nitze (1848–1906). His meteoric career had already started. That same year Albarrán was named Clinical Chief at the Necker Hospital and in 1892 he was appointed Associate Professor of Surgery. In 1894 he officially became Surgeon of the Hospitals in Paris and in 1897 he received the Tremblay Prize of the Academy of Medicine in Paris for the invention of the ‘lever’ that was incorporated by all cystoscope makers to make ureteral catheterisation easier (Figure 3). Many other prizes and recognitions followed in France and abroad. His outstanding participation in the ‘Traité de Chirurgie’ of Le Dentu

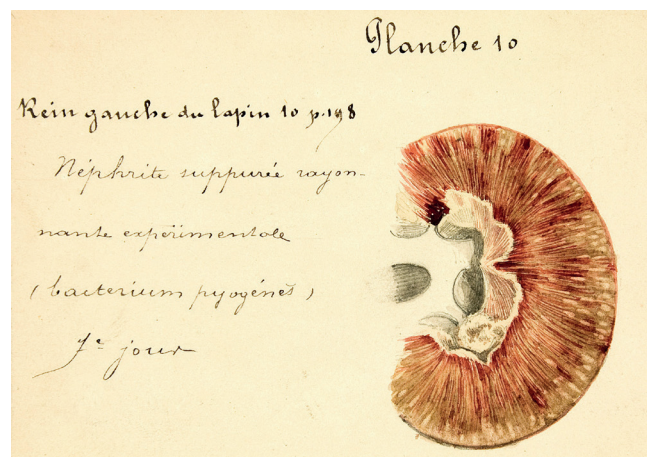


Figure 2: Watercolour from Albarrán's doctoral thesis, 1889.

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and Delbet consolidated his prestige in 1900. He served as a surgeon for the General Administration of Public Assistance in several hospitals in Paris from 1901 to 1906 and received many visitors from overseas. During these years he published two important books, *Les Tumeurs du Rein* in 1903 and *Exploration des Fonctions Rénales* in 1905.

In November 1906 he became full Professor and Chair of Department of Voies Urinaires in Necker. Among his visitors and fans, he was able to establish a wide network of professionals worldwide. With this group he was instrumental in the founding of the International Association of Urology (today the Société Internationale d'Urologie) and held its first congress in Paris in 1908. In the first months of 1909 his health deteriorated, and tuberculosis was declared. He managed to finish his final masterpiece *Médecine Opératoire des Voies Urinaires, Anatomie Normal et Anatomie Pathologique Chirurgicale*, considered by many the best book in urology ever published. He visited different maritime resorts in France and Spain in an attempt to control his illness, until his death in Arcachon on January 17 1912, at the age of 51. Two hundred and fifty articles, five books and several other chapters published during his 24 years constitute the scientific legacy of this gifted promise of urology. His pupils turned into the first academics and specialists in the field worldwide. Like the star he was, he died too young, but his light has not stopped shining.

To return to my initial questions, you now know that Joaquín Albarrán was a 19th century surgeon from Cuba; but also that his story is a little more complex. His surname means 'foreign' in Spanish and in fact, he was considered foreign everywhere, in Cuba he was Creole, in Barcelona, he was Cuban, in Paris he was a



Figure 3: Catheterisation cystoscope with Albarrán's lever.

Spaniard, but as such he developed his own character. You also now know that Joaquín Albarrán was a leader, an outstandingly brilliant person, tireless worker and family man.

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