

The neurological studies of Dr Robert (1842-1902), mentor to Barraquer Roviralta

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ABSTRACT

Introduction. The purpose of this article is to analyse the neurological interests of Dr Bartomeu Robert i Yarzabal (Tampico, Mexico 1842–Barcelona 1902), mentor to Dr Barraquer Roviralta, who in turn founded Spanish and Catalan clinical neurology.

Methods. We conducted a literature search on Medline with no date limits to locate the keyword ‘Bartomeu Robert’. We also drew from the doctoral thesis by M.G. Fabregas Camps (*Història de la Neurologia a Catalunya. De l’any 1882 a l’any 1949*); primary historical sources selected from the library of the Academy of Medical and Health Sciences of Catalonia and the Balearic Isles in Barcelona; and personal collections.

Results. Bartomeu Robert i Yarzabal, mentor to Barraquer Roviralta, was the most famous figure in medicine in his time. As an outstanding teacher and doctor, rose to the Department Chair of Internal Medicine, and was made president of the Reial Acadèmia de Medicina i Cirurgia. At a later date, he also became councilman and mayor of the city of Barcelona. He published around 200 scientific articles, 14 of which addressed such neurological issues as brain tumours, encephalic apoplexy, spinal cord diseases, epilepsy, neuropathological studies, antineuralgic treatment, and peripheral nervous system disease. Bartomeu Robert i Yarzabal died at the age of 59 as the result of a heart attack.

Conclusions. The neurological studies undertaken by Dr Bartomeu Robert, the grand master of medicine in his time, were remarkable and significant. Thanks to his direction and encouragement, Dr Barraquer Roviralta, one of his favourite students, would focus his efforts exclusively on studying neurological diseases and caring for patients with nervous disorders.

KEYWORDS

Bartomeu Robert, Luis Barraquer Roviralta, history, neurology, stroke

Los homes com en Robert al morir segueixen vivint en lo cor dels que es queden.

Dr Domènec Martí i Julià, 1902.

Introduction

Dr Bartomeu Robert i Yarzabal was born in the Mexican city of Tampico on 20 October 1842. His father and grandfather were doctors, and at the age of eight he returned to Sitges (Barcelona), his grandfather’s birthplace. He gained considerable prestige as a general internist and university professor as well as a public figure committed to many civic,

social, and cultural activities.^{1,2} However, little is known about his neurological studies even though they constitute one of the most important facets of this exemplary and engaging doctor and scientist. He also mentored Barraquer Roviralta (1855-1928), who would establish the practice of clinical neurology in Catalonia and Spain.

The purpose of this study is to present and analyse Dr Bartomeu Robert’s neurological interests as demonstrated by his clinical studies, care, and research, given that only his work in internal medicine is widely recognised. His very important contributions to clinical neurology have not yet been appropriately catalogued and studied.

Material and methods

We conducted a literature search on Medline with no date limits to locate the keyword 'Bartomeu Robert'. We also drew from the doctoral thesis by M. G. Fabregas Camps (*Història de la Neurologia a Catalunya. De l'any 1882 a l'any 1949*, presented in 1992 at the Universitat Autònoma de Barcelona),¹ primary historical sources selected from the library of the Academy of Medical and Health Sciences of Catalonia and the Balearic Isles in Barcelona, and personal collections. Findings are listed in the following section.

Results

1. General outline of the life of Dr Robert

Dr Bartomeu Robert began his medical career as a student intern at Hospital de la Santa Creu, Barcelona in 1862. Upon receiving his medical degree from Universidad de Barcelona on 22 October 1864, he was awarded the prize for the most outstanding graduate. In 1867, he completed his doctoral studies at Universidad Central de Madrid; in 1869, at the age of 26, he was made a consultant at in Hospital de la Santa Creu, the only general hospital in Catalonia at that time. In 1895, he earned top marks in a round of competitive exams to become Chair of Medical Pathology at the Barcelona Faculty of Medicine. He was 33 years old.^{3,4}

Dr Robert's mentor was Dr Josep de Letamendi (1828-1897). As Dr Robert wrote in Letamendi's obituary, "...it would be no exaggeration to say that Letamendi was Spain's leading authority on medicine in our century".⁵

Adopting the latest European advances as his model, he implemented changes that transformed the hospital.⁶ For the first time, he was granted authorisation by the hospital's board of directors (known as MIA for *Muy Ilustre Administración*) to organise doctors not as individual members of a pool but into systematically grouped services. He also managed to designate a teachers' lounge and subscribe to medical journals to promote awareness of scientific advances, and he was granted authorisation to build a new operating theatre, which modernised both the services and the hospital. His participation was also crucial to the founding of the new Hospital de Sant Pau.

Professor Robert was an exceptional, honest and unselfish man who enjoyed great social and professional prestige. He was the medical virtuoso of his time. In 1884, he was

called to examine Alfonso XII, who was terminally ill with pulmonary tuberculosis.^{5,6}

As a professor, he was a well-regarded pedagogue and an excellent public speaker. We should highlight that in addition to presenting excellent material in his classes, he added colour by imitating the main symptoms of each disease.



Figure 1. Dr Bartomeu Robert i Yarzabal, based on a drawing by Ramon Casas. Museu Nacional d'Art de Catalunya.

He was honoured as a favourite son of Sitges (Barcelona) and he often spent his summers in Camprodon, a town in the Catalan Pyrenees.³

Dr Robert was described as a cultivated, earnest, articulate, and honest man, with an encyclopaedic knowledge of history, and a remarkable level of interest in both scientific and civic topics.

Dr Robert died in Barcelona on 10 April 1902 of a heart attack at the age of 59.⁴ He was at the apex of his intellectual and professional output and his colleagues and society at large expressed their love and admiration. We should highlight that Dr Robert's burial remains one of the most-attended acts of public mourning in Catalonia, second only to the poet Jacint Verdaguer's funeral.^{2,5}

A monument to his memory was created in Barcelona by sculptor Josep Llimona (1910) using calcareous stone from the Garraf Massif. The sculpture was removed during Franco's dictatorship, only to be reassembled in Plaza de Tetuán, where it can be seen today.⁵

2. Civic and social contributions

Dr Robert was neither a politician nor a statesman, but he decided to enter politics from a desire to serve the community and address his civic concerns. As a representative of Modernism with his eyes on the future, he intended to change the face of Spanish politics as part of a movement that historians have named 'Regenerationism'. During his short but intense political phase, which occupied the last four years of his life, he frequently cited medical topics and examples in his speeches.⁵

From 1880 to 1884, and again from 1895 to 1897, he presided over the Catalan Reial Acadèmia de Medicina (known at that time as Acadèmia i Laboratori de Ciències Mèdiques); the Reial Acadèmia de Medicina i Cirurgia de Barcelona (1883-1890), Ateneu Barcelonés (1881-1882 and 1900-1901); and Societat Econòmica Barcelonina d'Amics del País (1898-1899), whose motto was "to encourage by teaching".^{2,5}

The latter third of the 19th century in Catalonia saw the rise of an awakening on the economic, artistic, social, linguistic, political, and even scientific levels. This was the Catalan renaissance, or *Renaixença*.⁶⁻⁷ Dr Robert provides a stellar example of a Catalan Renaissance man, and his position as an academic chair and doctor, added



Figure 2. Monument to Dr Robert in Sitges (Barcelona)

to his social commitment and personal integrity, granted him extraordinary credibility.⁵

The year 1898 saw the colonial disaster in which Spain lost Cuba, Puerto Rico and the Philippines. That time would herald a turning point in Dr Robert's career, since he became mayor of Barcelona shortly thereafter, on 14 March 1899. On that same day, he implemented ambitious reforms aimed at eradicating *caciquismo* and eliminating irregularities detected in the electoral roll. To this end, he dismissed all the district representatives suspected of electoral fraud, after which he updated the electoral roll.

Also in 1898, Raimundo Fernández Villaverde, Minister of the Treasury, designed financial budgets to compensate for the expenses incurred by colonial wars and the loss of the colonies. The budgets included excessive tax increases.⁵ The merchant guild of Barcelona, which included 146 guilds and 7000 Catalan citizens, protested against the abusive increase of fiscal pressure by presenting its joint manifesto *Manifestación contra los impuestos de guerra y proyectados recargos sobre la contribución* at Barcelona's Tivoli theatre. Also in the theatre, they made the decision to not pay taxes for that quarter in the protest known as *tancament de caixes* or cash box closure. The central government in Madrid, led by Francisco Silvela, responded with the drastic measure of ordering the seizure of the merchants' goods; Dr Robert, in his capacity as the mayor of Barcelona, refused to sign the order. He stepped down on 12 October 1899. Madrid's government declared a state of

war on 23 October and the province of Barcelona fell under martial law; 54 merchants were arrested and sentenced to prison. In response to these events, a Catalan political identity emerged in the form of the Lliga Regionalista, the first modern political party in the history of Catalonia, which would dominate regional politics during the first two decades of the 20th century. Its first president was none other than Dr Robert. Although Dr Robert's political career was very intense, it spanned only 4 years from his investiture as mayor of Barcelona to his being elected as a member of the Spanish Parliament, where he led the Catalan parliamentary minority. These activities gave Dr Robert an extraordinary level of public recognition, and he thus became the leading figure in Catalan society of his time.^{2,5}

3. Contributions to neurology

Dr Robert belonged to the prestigious “generation of 1888”, along with Joan Giné i Partagàs, Jaume Pi i Sunyer, and Miquel Àngel Fargas. This group of Catalan doctors arrived on the scene at the time of the 1888 Barcelona Universal Exposition, an event that promoted and modernised the city of Barcelona.^{2,9} An important medical congress, *Congrés de Ciències Mèdiques*, also took place in that year. It helped introduce the experimental method and a more scientific and analytical approach to medicine, based on developments by Claude Bernard and Rudolph Virchow. Dr Robert was awarded the gold medal for his scientific publications at the Barcelona Universal Exposition.

In the context of late 19th-century Catalan society, Dr Robert coincided with many pioneers in neurology at a time when medical specialties were beginning to emerge. Dr Robert motivated and mentored Luis Barraquer Roviralta (1855-1928). He also helped him set up Spain's first neurology department, then known as the Electrotherapeutic Dispensary, at the former Hospital de la Santa Creu in Barcelona in 1882.¹⁰⁻¹² This was the first unit in Catalonia and Spain dedicated exclusively to the care of patients with nervous system disorders. Dr Robert was also a contemporary of Josep Falp i Plana (1873-1913),¹³⁻¹⁵ who did groundbreaking work in the study of clinical, demographic, and population-based studies of stroke (*feridura* in Catalan), and who is considered the founder of the study of neurovascular diseases in our country. He also moved in the same circles as Artur Galcerán i Granés (1850-1919), founder and president of the Barcelona

Society of Psychiatry and Neurology, which in 1911 became the first neurological society in both Catalonia and Spain.^{16,17}

Dr Robert's medical publications are varied and extensive, making him one of the most prolific professors and doctors of his time. He completed a total of 6 books, 8 monographic studies, 3 prefaces, 2 obituaries, and 200 medical articles. We should also highlight that he collaborated with his colleague Dr Giné i Partagàs to produce the first Spanish-language version of Rudolph Virchow's

Tabla 1. Main neurological publications by Dr Robert

1.	Parálisis del nervio facial: curación [Healing facial nerve palsy], <i>Independencia Médica</i> , 1869
2.	Diagnóstico de los tumores del encéfalo [Diagnosis of brain tumours], <i>Independencia Médica</i> , 1870
3.	Apoplejía encefálica. Hemiplejía consecutiva. Tratamiento a favor de la ergotamina [Encephalic apoplexy. Secondary hemiplegia. Ergotamine treatment], <i>Independencia Médica</i> , 1871
4.	Apoplejía raquidiana: muerte [Death from rachidean apoplexy], <i>Independencia Médica</i> , 1871
5.	Patología de médula [Spinal cord pathology], <i>Independencia Médica</i> , 1873 Study published in four parts in four issues of the same journal (dated 11 February, 1 March, 21 March and 11 April 1873).
6.	Zona: tratamiento antineurálgico: curación [Zone: antineuralgic treatment: healing], <i>Independencia Médica</i> , 1873
7.	Epilepsia de origen periférico. Contribución a los estudios epileptógenos [Peripheral-origin epilepsy. Contribution to epileptogenic studies] <i>Independencia Médica</i> , 1874
8.	Otitis externa. Fenómenos cerebrales consecutivos. Muerte [External otitis, secondary brain events, and death] <i>Independencia Médica</i> , 1875
9.	Pneumonia con delirio por anemia cerebral [Pneumonia with delirium due to cerebral anaemia], <i>Independencia Médica</i> , 1877
10.	Necesidad de ampliar los estudio neuropatológicos [The need for further studies of neuropathology], <i>Acadèmia de Medicina i Cirurgia</i> , 1880
11.	Estudios neuropatológicos [Studies of neuropathology], <i>Independencia Médica</i> , 1882
12.	Lesión del nervio frénico [Lesion of the phrenic nerve], <i>Revista de Ciencias Médicas de Barcelona</i> , 1887
13.	Lesión del nervio frénico [Lesion of the phrenic nerve], <i>Revista de Medicina y Cirugía Prácticas</i> , 1887
14.	Enfermedad del simpático (<i>Revista de Medicina y Cirugía Prácticas</i> , 1898)

prestigious *Cellular Pathology* by translating the French version.¹⁸⁻²¹

Dr Robert's fascination with neurological diseases can be observed from the title of one of his monographic studies, *Necesidad de ampliar los estudios neuropatológicos* (The need for further studies of neuropathology, 1880, 49 pages). The article was based on his address inaugurating the academic year at Barcelona's Reial Acadèmia de Medicina i Cirurgia. In his monographic study *Patología Médica* (1875), Dr Robert divided cerebrovascular diseases into cerebral hyperaemia, cerebral anaemia, cerebral haemorrhage, and cerebral softening.^{18,19}

Dr Robert's attraction to and interest in neurological diseases is reflected by the quality of his publications on that subject. Of his 200 published scientific studies, 14 were related to neurology, and they touched on brain tumours, encephalic apoplexy, spinal cord diseases, epilepsy, neuropathological studies, antineuralgic treatment, and peripheral nervous system diseases. All were accepted by prestigious scientific journals of his time: *Independencia Médica*, *Revista de Ciencias Medicas de Barcelona*, and *Revista de Medicina y Cirugía Prácticas* (Table 1).¹⁸⁻²² He also published medical commentaries intended for the general public in the newspaper *La Vanguardia* in 1901, including several that referred to the brain or defended specialisation in medicine.²⁰

Conclusions

Although Dr Robert's neurological research is not well known, his contributions were both remarkable and significant. In addition to mentoring Dr Barraquer Roviralta, he was the first physician to regard neurological diseases as entities with their own specific characteristics and a level of complexity that would require personalised and specialised care.

Conflicts of interest

The authors have no conflicts of interest to declare.

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