

# The first neurology departments in Catalan hospitals and the significance of Barcelona's node of hospitals offering neurological care

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## ABSTRACT

**Introduction.** We completed a literature review to analyse the early history of neurology in Catalan hospitals.

**Development.** The method consisted of analysing and studying minutes from the meetings of the Catalan Society of Neurology since 1973; consulting original historical sources in Barcelona's Library of the Academy of Medical Sciences of Catalonia and the Balearic Islands; and performing a directed search based on personal historical sources and the doctoral thesis written by Marta Gloria Fàbregas (*Història de la Neurologia a Catalunya. De l'any 1882 a l'any 1949*. Universitat Autònoma de Barcelona, 1992). The review confirms that the first hospital neurology programme took shape at Hospital de la Santa Creu (1882). In the first half of the 20th century, neurology departments were founded in a group of tertiary hospitals that we will call the Barcelona node of hospitals offering neurological care. The first hospitals were Hospital Clínic, Hospital del Sagrat Cor, Institut Neurològic Municipal, and Hospital del Mar, and the node later expanded to include other hospitals in Barcelona (Hospital Universitari Vall d'Hebron and Hospital de la Creu Roja) and referral hospitals in Catalonia. At present, 54 Catalan hospitals have neurology specialists on staff.

**Conclusions.** Barcelona's hospitals offering neurological care played a pioneering role in developing and solidifying neurology as a new speciality in the field of medicine.

## KEYWORDS

Hospital de la Santa Creu, Hospital Clínic, Hospital del Sagrat Cor, Hospital del Mar, Barcelona hospitals offering neurological care, history of neurological societies.

## Introduction

*Del passat, el temps perdut i no oblidat, se'n pot aprendre, si es vol*

J Piera, 2012. Joc de Daus

Neurology, as it is currently understood, is a relatively recent addition to habitual medical practice even though Catalonia's first neurological society was established more than a century ago (Sociedad de Psiquiatría y Neurología de Barcelona, founded by Artur Galcerán i Granés in 1911).<sup>1-4</sup> Furthermore, Luis Barraquer Roviralta had laid the foundations for neurology to be recognised as an independent and defined medical speciality by creating the first 'dispensary for neurology

and electrotherapy' in Barcelona in 1882. This unit supported the view of neurology as a new speciality within medicine.<sup>5-7</sup>

In general terms, neurology departments first appeared in university hospitals in Barcelona, beginning with Hospital de la Santa Creu. They then gradually began to appear in other university hospitals in the city before spreading to referral hospitals across Catalonia.<sup>8,9</sup> One important trend in recent years is the slow but steady expansion of neurological care, which is now being offered for the first time by smaller Catalan hospitals. This expansion is the result of the efforts made by neurologists in leading hospitals in Barcelona years before.

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## Development

This review analyses the first advances of neurology in Catalan hospitals with historical links to that specialty, placing emphasis on the work of some of our leading neurologists. Methodology was as follows: 1) analysis of the minutes of meetings of the Catalan Society of Neurology between 1973 (under the presidency of Dr A. Codina) and the present; 2) consultation of original historical sources kept in Barcelona's Library of the Academy of Medical Sciences of Catalonia and the Balearic Isles; 3) directed search based on *Història de la Neurologia a Catalunya. De l'any 1882 a l'any 1949*, the doctoral thesis by Marta Gloria Fàbregas Camps<sup>7</sup>; and 4) consultation of personal historical sources. Results obtained are indicated below.

Barcelona hospitals with historical links to the development of neurology

The role played by Barcelona's first hospitals to offer neurological care was an important one. Initially, they contributed to the inception of neurology as a specialty; later, they helped it develop and consolidate as a new medical specialty. In the next section, we list those hospitals offering neurological care in Barcelona which were key figures in the history of the neurological specialty.

### Hospital de la Santa Creu i Sant Pau

The old Hospital de la Santa Creu dates back to 1401, during the reign of Martin the Elder, King of Aragon. In 1882, Dr Barraquer Roviralta, with assistance from Dr Bartomeu Robert,<sup>10-12</sup> founded the first neurological 'dispensary', all the while continuing to see patients under the massive Gothic naves of the old hospital building. Using the money bequeathed by Pau Gil, the architect Domènech i Muntaner built Hospital de la Santa Creu i Sant Pau. That hospital was officially opened by King Alfonso XIII in 1930 at its new site in the Horta-Guinardó quarter in Barcelona.<sup>13-15</sup>

This was also the first hospital to prioritise having a staff of doctors providing care in that hospital only, with no private engagements. When Universitat Autònoma de Barcelona was founded in 1933, the hospital gained both university hospital status and new perspectives with respect to both teaching and care.

The neurology department was headed by Dr Barraquer Ferrer, then by Dr Castañer Vendrell, and later, by Dr Barraquer Bordas, the grandson of its founder.

### Hospital Clínic i Provincial de Barcelona

In 1932, Dr Antonio Subirana began providing care to neurological patients out of Dr Ferrer Solvencens's pathology department without teaching any classes at the time. Between 1942 and 1943, Subirana also worked from that department, where he saw patients and taught classes, especially neurology classes for fifth year students.

When Dr Ignasi de Gisbert began working at Hospital Clínic, he treated neurological patients in Professor Soriano's pathology department.<sup>4,8</sup> Dr Carlos Oliveras de la Riva joined Dr Gibert Queraltó's pathology department in 1944, where he ran the neurology clinic and cared for hospitalised neurological patients. Oliveras de la Riva was the leading authority on the lathyrism epidemic in Catalonia. That disease and its clinical, epidemiological, aetiological, and pathological characteristics provided the subject for his doctoral thesis, presented in 1942: *Estudio clínico, epidemiológico y etiopatológico de la epidemia de latirismo en Cataluña*. In 1978, he was made senior lecturer and named director of the Professional Postgraduate School for the specialty of neurology. That institution disappeared in the mid-1980s when the MIR or residency system was implemented. Dr Valls Solé and Dr Barnosell, both of whom had studied in the professional school, performed their first electromyography tests at Hospital Clínic.

Dr Sales Vázquez was head of the neurology dispensary when it was part of the general pathology department under Dr Nadal. In 1946, Sales became head of the neurology dispensary within the medical pathology department run by Dr Pedro Pons. He held that position until 1966. In 1968, he was named director of the rehabilitation and traumatology centre in the hospital formerly known as the Francisco Franco Sanatorium (currently, Hospital Universitari de la Vall d'Hebron). He remained in charge of that unit until his death in 1971.

### Hospital Universitari de la Vall d'Hebron

Hospital Universitari de la Vall d'Hebron is part of the second wave of important hospitals that began offering neurological care in Barcelona. In 1973, the hospital had three unit heads: Dr Agustí Codina, Dr Nolasc Acarin, and Dr Juan Zunzunegui. In 1984, Dr Codina became head of the neurology service.

Between April 1971 and 1980, the neurology service at Hospital de la Vall d'Hebron was located in the rehabilitation and traumatology centre. This location was due

to the service being constituted by the fusion of the neurology unit headed by Dr A. Codina, the department of internal medicine under Dr A. Pedro Pons, and the neurology unit pertaining to the rehabilitation and traumatology centre under Dr R. Sales Vázquez.<sup>4,8</sup>

#### Hospital de la Creu Roja

From 1962 to 1987, the neurology service at HCR was headed by Dr Josep Maria Espadaler Medina.

#### Hospital Sagrat Cor

The hospital was founded in 1879 and its first director, Dr Salvador Cardenal, was one of the founders of modern surgery. As a result, Hospital Sagrat Cor was a prestigious institution and training centre for the leading surgeons of its day.<sup>16</sup>

Dr Barraquer Roviralta was a consultant at that hospital, where he set up a neurology dispensary.<sup>6</sup> Dr Lloret i Gil was head of the neurology service and director of the centre beginning in 1928; he stepped down for political reasons in 1939. He was immediately succeeded by Dr A. Subirana; Dr L. Oller-Daurella, a leading figure in epilepsy, was to fill the position from 1943 to 1973. After Oller-Daurella, Dr M. Balcells was head of neurology until 1998.

#### Institut Neurològic Municipal and Hospital del Mar

The clinic known as Institut Neurològic Municipal (INM) opened its doors on 1 December 1936. Dr Belarmino Rodríguez Arias was its first director; he retired in 1965.<sup>5-8</sup> INM had two neurological units (for patients with chronic and chronic rapidly-progressing illnesses) and a neurosurgery division for trauma patients and others. Famous names associated with the clinic include Dr Eduard Tolosa, Dr Adolfo Ley, Dr Nicanor Ancochea, Dr Antonio Vila Coro, and Dr J.M. Catases.

Following Dr Adolfo Azoy's stint as the interim director and then as full director of the clinic, the position would be occupied by Dr Antonio Subirana Oller, who had introduced use of EEG in Spain. The new Hospital del Mar annex was inaugurated on 19 December 1973. Dr. Manuel Subirana directed INM between 1978 and 1981. He was succeeded by Dr J. Solé Llenas. In 1985, INM was incorporated into Hospital del Mar as a neurology service, and its director was Dr A. Pou Serradell until his retirement.

#### Hospital de l'Esperança

A. Subirana, M. Subirana Cantarell, and E. Masó were pioneers in the neurological care which began to be offered in Hospital de l'Esperança in the 1960s.

#### Hospital del Nen Jesús de Barcelona

Dr Joaquim Mansilla i Planas formed part of the paediatric neuropsychiatry service at HNJ between 1972 and 1977.

#### Expansion into other Catalan hospitals

After the initial node of Barcelona hospitals offering neurological care had taken shape, other neurology units were created. One by one, the following hospitals in Barcelona province added neurology services: Hospital de Sant Joan de Déu in Esplugues de Llobregat, Hospital Universitari de Bellvitge in L'Hospitalet del Llobregat, Hospital de la Creu Roja in L'Hospitalet de Llobregat, Hospital Mútua in Terrassa, Clínica Infantil del Nen Jesús in Sabadell, Hospital Sant Jaume i Santa Magdalena in Mataró, Hospital Germans Trias i Pujol in Badalona, and Corporació Sanitària Parc Taulí in Sabadell.

The first hospitals in Tarragona province to incorporate neurology units were Hospital Joan XXIII and Hospital Sant Pau i Santa Tecla (Tarragona), Hospital Psiquiàtric Universitari Institut Pere Mata (Reus) and Hospital Universitari Sant Joan (Reus), Hospital Pius (Valls), and Hospital del Vendrell (El Vendrell).

In Lleida province, we find Hospital Universitari Arnau de Vilanova (named after General Moscardó during the dictatorship) and Clínica La Aliança.

Key hospitals in the development of hospital neurology in Girona province included Hospital Universitari Dr. Josep Trueta de Girona (known as 'Álvarez de Castro' during the dictatorship), the Santa Caterina provincial hospital (currently known as Parc Hospitalari Martí i Julià), Clínica de Girona, Hospital de Olot (Hospital comarcal de la Garrotxa), Hospital de Figuerès, and Hospital de Palamós.

#### Catalan hospitals with neurologists currently on staff

A recent study carried out by the Catalan Society of Neurology<sup>17</sup> informs us that there are currently 54 local or tertiary Catalan hospitals with neurologists on staff. Of these, 38 are located in Barcelona province, 7 in Tarragona province, 7 in Girona province, and 2 in Lleida province (Table 1).

**Table 1.** List of Catalan hospitals providing neurological care

<b>a. Barcelona Province</b>			
Centre Sanitari del Solsonés (Solsona)	Hospital comarcal Sant Jaume de Calella (Calella)	Hospital del Mar (Barcelona)	Hospital residència Sant Camil (Sant Pere de Ribes)
Clínica de la Sagrada Família (Barcelona)	Hospital d'Igualada-Consorci Sanitari de l'Anoia (Igualada)	Hospital Dos de Maig. Consorci Sanitari Integral (Barcelona)	Hospital Sant Bernabé (Berga)
Clínica de Vic (Vic)	Hospital de l'Esperit Sant (Santa Coloma de Gramenet)	Hospital General de Catalunya (Sant Cugat del Vallès)	Hospital Sant Joan de Déu de Martorell (Martorell)
Clinica Teknon (Barcelona)	Hospital de la Santa Creu i Sant Pau (Barcelona)	Hospital General de Granollers (Granollers)	Hospital Universitari de Bellvitge (L'Hospitalet de Llobregat)
Corporació Sanitària Parc Taulí (Sabadell)	Hospital de Mataró (Maresme healthcare consortium) (Mataró)	Hospital General de L'Hospitalet (L'Hospitalet de Llobregat)	Hospital General de Vic (Vic)
Fundació Althaia (Manresa healthcare network) (Manresa)	Hospital de Sant Boi (Sant Boi de Llobregat)	Hospital Moisès Broggi (Sant Joan Despí)	Hospital Universitari del Sagrat Cor (Barcelona)
Hospital Benito Menni (Sant Boi de Llobregat)	Hospital de Sant Joan de Déu (Esplugues de Llobregat)	Hospital Municipal de Badalona (Badalona)	Hospital Universitari Germans Trias i Pujol (Badalona)
Hospital Clínic i Provincial de Barcelona (Barcelona)	Hospital de Terrassa. Consorci Sanitari de Terrassa (Terrassa)	Hospital Mútua de Terrassa (Terrassa)	Hospital Universitari Vall d'Hebron (Barcelona)
Hospital comarcal de l'Alt Penedès (Vilafranca del Penedès)	Hospital de Viladecans (Viladecans)	Hospital Plató (Barcelona)	Institut Guttmann (Badalona)
		Hospital Quirón (Barcelona)	Recinte Torribera. Centres Assistencials Dr. Emili Mira i López (Santa Coloma de Gramenet)
<b>b. Tarragona Province</b>			
Hospital de Tortosa Verge de la Cinta (Tortosa)	Hospital Sant Pau i Santa Tecla de Tarragona (Tarragona)	Hospital Universitari de Tarragona Joan XXIII (Tarragona)	Pius Hospital de Valls (Valls)
Hospital del Vendrell (El Vendrell)	Hospital Universitari de Sant Joan de Reus (Reus)	Institut Pere Mata (Reus)	
<b>c. Girona Province</b>			
Clínica de Girona (Girona)	Hospital de Figueres (Fundació Salut Empordà) (Figueres)	Hospital de Santa Caterina (Parc Hospitalari Martí i Julià). (Salt)	Hospital Universitari Dr. Josep Trueta (Girona)
Hospital de Campdevàrol (Campdevàrol)	Hospital de Palamós (Palamós)	Hospital Sant Jaume d'Olot (Olot)	
<b>d. Lleida Province</b>			
Clínica de Lleida (Lleida)	Hospital Universitari Arnau de Vilanova (Lleida)		

### Teaching neurology in Catalan hospitals

At present, the levels of care, instruction, and research in hospital neurology have reached high levels of excellence. Proof of this excellence is that Catalan hospitals are the pillars of clinical instruction in neurology for undergraduates attending all seven Catalan universities with medical schools: Universitat de Barcelona, Universitat Autònoma de Barcelona, Universitat Internacional de Catalunya, Universitat Pompeu Fabra, Universitat de Lleida, Universitat Rovira i Virgili (Reus-Tarragona), and Universitat de Girona.

Catalan tertiary care centres are prestigious and have demonstrated track records in providing graduate-level training for future specialists in neurology who are completing their residencies. Local hospitals also provide graduate-level neurology courses to residents in internal medicine or family and general practice.

Lastly, internationally recognised and prestigious lines of research exploring both clinical and basic neurology are found in Catalonia, thanks to the equipment and resources in its leading tertiary care centres.

### Conclusions

Hospital neurology care in Catalonia first appeared in Hospital de la Santa Creu under Barraquer Roviralta in the late 19th century. From that moment, major centres nearby slowly but surely began to implement neurology programs, thereby creating the Barcelona node of hospitals offering neurological care. Neurological care then began to be offered in other hospitals in the province of Barcelona and in the rest of Catalonia.

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