

French school of neurology in the 19th and first half of the 20th century, and its influence in Brazil

Escola francesa de neurologia no século 19 e primeira metade do século 20, e sua influência no Brasil

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ABSTRACT

French medicine was of the utmost importance for the birth of modern medicine and neurology in the 19th century. Innovative approaches, such as examination at the bedside, the use of the stethoscope, techniques of auscultation, palpation, and close patient examination, besides emphasis on anatomical-clinical correlation and observation of the outcome of the disease, were put into practice. French medicine offered professional training and incentives for the beginnings of Brazilian neurology and psychiatry. Returning from France, many Brazilian physicians implemented what they had learned, mainly in Paris. The most important pupils of the French neurology schools in Brazil during the 19th century and first half of the 20th century include names like Antonio Austregesilo, Aloysio de Castro, Enjolras Vampré, and Deolindo Couto, founders of the leading Brazilian neurological schools, directly influenced by Dejerine, Pierre Marie, Guillain and Babinski.

Keywords: history, neurology, French school, Brazilian school.

RESUMO

A medicina francesa é de extrema importância para o nascimento da medicina moderna e a neurologia do século 19. Foram colocadas em prática diversas inovações, como exame à beira do leito, uso de estetoscópio, técnicas de palpação, ausculta e exame do paciente, além da observação dos desfechos da doença e ênfase à correlação anátomo-clínica. A medicina francesa ofereceu capacitação profissional e incentivo para a fase inicial da neurologia e psiquiatria brasileiras. Voltando da França, muitos médicos brasileiros implementaram o que tinham aprendido, principalmente em Paris. Os mais importantes discípulos das escolas francesas de neurologia no Brasil no século 19 e metade do 20 incluem nomes como Antonio Austregesilo, Aloysio de Castro, Enjolras Vampré e Deolindo Couto, fundadores das principais escolas brasileiras neurológicas, influenciados diretamente por Dejerine, Pierre Marie, Guillain and Babinski.

Palavras-chave: história, neurologia, escola francesa, escola brasileira.

Brazilian medicine, in the 19th century and the first half of 20th century was mainly influenced by French medicine, and reinforced later by a German contribution². This also includes the influence exerted by Jean-Martin Charcot (1825–1893) and his followers on the leaders of the first Brazilian schools of neurology (in Rio de Janeiro, the majority, and also in São Paulo).

FRENCH MEDICINE: 19th CENTURY AND BEGINNING OF THE 20th CENTURY

France after the Napoleonic revolution emphasized the hospital ward as the most important place for medical activity, and public health measures were seen as a duty of the State, with medical practice open to all classes³.

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Conflict of interest: There is no conflict of interest to declare.

Received 13 December 2012; Received in final form 09 May 2013; Accepted 16 May 2013.

The main characteristic of 19th century medicine was the correlation of observations obtained at the bedside with laboratory discoveries through autopsy³. Among many famous names it is necessary to highlight those that follow. Philippe Pinel (1745–1826) was concerned with classification of diseases, and later favored specialization in mental diseases^{3,4}. Rene-Theophile-Hyacinthe Laennec (1781–1826), inventor of the stethoscope and apologist of the anatomical–clinical method, was one of the finest clinicians of the time, but was not as renowned as François-Joseph-Victor Broussais (1772–1838), who considered that proper treatment should focus on changes in tissue pathology³. Finally, the main founders of clinical neurology in France were Guillaume B. A. Duchenne (1806–1875) and the remarkable Charcot³. Charcot adopted the anatomical–clinical method and became world-famous through his clinical lectures at L'Hôpital de la Salpêtrière in Paris. Many of his pupils and/or successors were influential members of French neurology community^{5,6}.

FRENCH MEDICINE AND THE PRECURSORS OF BRAZILIAN NEUROLOGY

French medicine exerted a strong influence on Brazilian physicians who held pioneering roles in their professional field. Three of them who were the “first” in their field of knowledge must be stressed.

José Martins da Cruz Jobim (1802–1878), graduated in Medicine at the Faculté de Médecine de Paris (1828), was strongly influenced by the doctrine of François Broussais (1772–1838)⁷. As the author of the first Brazilian neuropsychiatric text, *Insania loquax* (1831), he may be regarded as the first Brazilian neuropsychiatrist⁷.

João Vicente Torres Homem (1837–1887), the author of the first Brazilian medical book fully committed to neurology⁸, *Lições sobre as moléstias do systema nervoso...* (1886), was the Internal Medicine Chair in Rio de Janeiro. According to Nava (apud Fiocruz)⁹: “Torres Homem is the representative type, the index, the sum of whom was the result of the influence of French Medicine on the evolution of indigenous clinics. To the cycle of French influence we are indebted – and in the human personality and as medical teacher, Torres is the symbol of it”.

João Carlos Teixeira Brandão (1854–1921), the first Brazilian professor of the chair of “Mental and Nervous Diseases”², the “father” of the Brazilian psychiatry, was inspired by the conceptions of the French alienists, such as Morel’s “degenerescence” (Bénédict-Augustin Morel, 1809–1873)^{2,4}. He spent time in France, Germany, and Italy to study European Psychiatry.

FRENCH NEUROLOGISTS AND THEIR INFLUENCE ON BRAZILIAN NEUROLOGY

Besides the previously cited precursors (Jobim, Torres Homem, Brandão), Brazilian neurology was strongly influenced by the modern French neurological school, which had Charcot as its powerful “patron”¹. Charcot provided clinical and pathological descriptions of multiple sclerosis, amyotrophic lateral sclerosis, hereditary motor and sensory neuropathy, and motor ataxia. He labeled “shaking palsy” with Parkinson’s name, and the “*maladies des tics*” with that of Gilles de la Tourette. Aphasia and agnosia passed through his sieve, and some signs and diseases were named after him⁵. Despite Charcot’s dominance of French neurology, other significant names in this field developed careers in an independent way, such as Charles-Édouard Brown-Séquard (1817–1894) and Joseph-Jules Dejerine (1849–1917). Dejerine was Vulpian’s (Alfred Vulpian, 1826–1887) pupil at the Hôpital Bicêtre, and Charcot’s collaborator. Fulgence Raymond (1844–1910), Charcot’s senior *chef de clinique*, succeeded Édouard Brissaud (1852–1909) at the Salpêtrière^{5,6}, and Dejerine followed after Raymond’s death (1910). It is necessary to mention that Brissaud, Charcot’s temporary successor, was also a pupil of Pierre Paul Broca (1824–1880), one of the pillars of modern neurology⁵. Pierre Marie (1853–1940), one



Joseph-Jules Dejerine
(1849-1917)



Pierre Marie
(1853-1940)



Jose Babinski
(1857-1932)



Georges Guillain
(1876-1961)

Figure 1. The main Parisian neurologists who influenced the founders of Brazilian neurology.

Table 1. The main direct influences of the Parisian neurological school on the first leaders of Brazilian neurology^{1,5,6}.

Neurologist	Main hospitals	Main works	Brazilian pupil
Dejerine	Head of a department at the Bicêtre hospital, moved to the Salpêtrière hospital	Landouzy-Dejerine syndrome or facioscapulohumeral muscular dystrophy Dejerine-Sottas hypertrophic neuropathy: sporadic form of olivopontocerebellar atrophy, in collaboration with André Thomas – Dejerine-Roussy syndrome due to thalamic lesion	Enjolras Vampré Antonio Austregesilo
Marie	Head of a department at the Bicêtre hospital, then at the Salpêtrière hospital	Charcot-Marie-Tooth disease – Marie's anarthria – Marie's ataxia – Marie-Foix-Alajouanine syndrome	Aloysio de Castro Antonio Austregesilo
Babinski	Salpêtrière hospital, after head of a medical department at the Pitié hospital, for his entire career	Babinski's signs allowing to make the distinction between organic and functional (hysterical) disorders refined the cerebellar semiology Anton-Babinski syndrome Babinski's syndrome Babinski-Fröhlich syndrome Babinski-Froment syndrome Babinski-Nageotte syndrome	Enjolras Vampré Antonio Austregesilo
Guillain	Charité hospital until professorship of neurology at the Salpêtrière hospital	Guillain-Alajouanine-Garcin syndrome Guillain-Barré-Strohl syndrome – Guillain-Mollaret triangle	Enjolras Vampré Deolindo Couto

of Charcot's favorite pupils, teacher at the Faculty of Paris (1889), created a neurological service at Bicêtre^{5,6}. In 1907, he succeeded Charcot as Chair of Pathological Anatomy, and, in 1918, he became Professor of Clinical Neurology at the Salpêtrière after Dejerine^{5,6}. Later, Georges Guillain (1876–1961), who obtained his medical doctorate at Paris in 1898, became Professor of Neurology at the Salpêtrière in 1923⁵. Joseph Jules François Félix Babinski (1857–1932) at La Pitié, one of the stars of the “master's” circle, became an important leader of the new neurology⁵.

The illustrious French personalities, Dejerine, Marie, Babinski, and Guillain, members of the “Parisian neurologists” (Figure 1 and Table 1), who trained students and doctors from around the world, were the main French mentors of some pioneers of Brazilian neurology, as mentioned below.

Antônio Austregesilo Rodrigues de Lima (1876–1960), who may be seen as the father of Brazilian neurology, was trained in Paris by Dejerine, Marie, and Babinski¹. He wrote an extensive bibliography on mental diseases, and in 1912 became Head of Neurology at the School of Medicine in Rio de Janeiro. There, he introduced the new specialty, created the first neurological school in Rio de Janeiro, and was one

of the founders of Arquivos Brasileiros de Neurologia e de Psiquiatria.

Aloysio de Castro (1881–1959), a co-founder of Brazilian neurology, traveled to Europe, where he expanded his knowledge on nervous semiology at the Hôpital Bicêtre¹⁰ under the supervision of Pierre Marie.

Enjolras Vampré (1895–1938) is seen as the father of Neurology in São Paulo, at the time the second most important neurological school in Brazil. In Paris, he attended lessons given by Babinski, Dejerine, Foix, and Bertrand (1908, 1925), and qualified at the Salpêtrière hospital under the supervision of George Guillain¹.

Deolindo Augusto de Nunes Couto (1902–1992), the most influential neurologist in Brazil from 1945 to 1972, was Guillain's disciple at Salpêtrière hospital (1935 and 1936)¹, and along with his colleagues introduced French medical knowledge, the methodology and way of thinking to Brazil, which have become mainstays of Brazilian neurology.

These distinguished followers of the French school, the founders and developers of Brazilian neurology, left a legacy for future Brazilian generations, and owe a debt to the Gallic neurology.

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