HISTORICAL NEUROLOGY AND NEUROSURGERY

On the Names of Babiński

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ABSTRACT: The 100th anniversary of the discovery of the extensor plantar response will be celebrated in 1996. It was Joseph François Félix Babiński who became known worldwide for the sign that bears his name. In order to help Joseph in establishing his career, brother Henri gave up his aspirations and abandoned engineering. Clovis Vincent, 'father' of French neurosurgery and pupil of Joseph, stated: "Joseph Babinski lived for science, and Henri lived for his brother; without Henri Babinski, Joseph would not have accomplished that much". However, Henri's name became famous in all Paris for a cookbook *Gastronomie Pratique* written under the pseudonym of 'Ali-Bab.' Throughout Joseph's career his surname remained distorted despite his own efforts to spell and pronounce it correctly. Several people can claim the name Babiński, but in neurology and neurosurgery there is only one, Joseph.

RÉSUMÉ: À propos du nom Babiński. Le centième anniversaire de la découverte du réflexe cutané plantaire par Joseph François Babiński sera célébré en 1996. Le signe qui porte son nom lui a valu une renommée internationale. Son frère Henri a renoncé à son rêve de devenir ingénieur pour aider Joseph à établir sa carrière. Clovis Vincent, le père de la neurochirurgie française et l'élève de Joseph, déclarait: "Joseph Babinski vivait pour la science et Henri vivait pour son frère; sans Henri Babinski, Joseph n'aurait pas accompli autant". Cependant, Henri est devenu fameux dans tout Paris pour son livre de cuisine intitulé *Gastronomie Pratique*, écrit sous le pseudonyme "Ali-Bab". Tout au long de sa carrière, son nom était continuellement déformé en dépit de ses efforts pour le prononcer et l'écrire correctement. Plusieurs peuvent revendiquer le nom Babiński, mais en neurologie et en neurochirurgie il n'y en a qu'un, Joseph.

Can. J. Neurol. Sci. 1996; 23: 76-79

THE SIGN THAT BEARS HIS NAME

The centenary of the Babiński sign discovery is coming up in 1996. One hundred years ago, on February 22, 1896, before the *Société de Biologie*, Joseph François Félix Babiński (Figure 1) presented a preliminary report on *réflexe cutané plantaire* (cutaneous plantar reflex)¹ observed earlier by Remak² and Strümpell,³ and pointed out to him by Vulpian, Babiński's first teacher.⁴ This landmark 28-line article briefly described the sign and noted its association with organic hemiparesis. Wartenberg,⁵ while working under Babiński in 1926, asked him about the circumstances that led to the discovery of the plantar cutaneous response. Babiński replied that at one time neurologists were very concerned with the distinction between organic and hysteric hemiplegia. Therefore, Babiński investigated all reflexes and found that in organic hemiplegia the response to plantar stimulation was dorsal, and not plantar.

Two years after the preliminary report, Babiński published a detailed explanation of the clinical significance of this phenomenon, showing its correlation with pyramidal tract disturbance. He presented several patients with organic hemiplegia in whom he found interruption in the corticospinal tract pathway. He also noticed that the toe phenomenon was not directly related to the severity of paralysis or to the degree of hyperreflexia. In fact, the clinical usefulness of the sign can be summarized in his own words: "I want only to have you note that its [toe phenomenon's] semiologic value is particularly great in the cases in which the state of the tendon reflexes does not permit us to

discern the state of the pyramidal system. Thus, in recent organic hemiplegia the tendon reflexes are generally, as you know, normal or weakened, and we agree that it is often impossible to distinguish, at first, a hysterical from organic hemiplegia. In a case of this kind, the existence of the sign of the toes is particularly valuable because it permits us to rule out the hypothesis of hysteria". 6 De l'abduction des orteils (signe de l'éventail) i.e., fanning of the toes, a part of the sign, was not mentioned in the original paper but presented separately in 1903. 7 The fame of Babiński's sign aroused interest among neurologists throughout the world and a number of modifications were described. 8-13

THE MISSPELLED NAME

Joseph's, and his brother Henri's, parents fled from Poland to Paris where they remained in exile. Both brothers, born in France, attended a Polish elementary school, l'École Polonaise des Batignolles, and became fluent in the language of their parents. Preserved documents with Joseph Babiński's signature (Figure 2)¹⁴ as well as that of his brother Henri (Figure 3)¹⁵

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RECEIVED DECEMBER 12, 1994. ACCEPTED IN FINAL FORM AUGUST 11, 1995.

Presented in part at the World Congress of Neurology, Vancouver, British Columbia, Canada, September 5-10, 1993.

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confirm that a letter '\'n' ('n' with a slash over it) should replace the erroneously used 'n' in the spelling of his name which remains spelled without distortion in Polish medical literature.\(^{16}\)

As to the proper pronunciation of the last name, John Fulton¹⁷ stated in an obituary: "Babinski retained the Polish pronunciation of his name, i.e. 'Babinski', with the English value of 'in' as in information, and French neurologists have generally recognized it". This statement, however, appears to be contradictory. The pronunciation of the letter '\hat{n}' cannot be correct in both Polish and English languages at the same time. Due to the absence of the letter '\hat{n}' ('\hat{n}' with a slash over it) in the alphabets other than Polish, both spelling and pronunciation remained altered since both '\hat{n}' and '\hat{h}' remain two separate letters and sounds in the Polish alphabet. The closest equivalent that could resemble the sound of a Polish '\hat{n}' in English could be found in the words 'niece', 'cognac', or 'armagnac'.

JOSEPH BABIŃSKI

Joseph Babiński graduated from the University of Paris in 1885 with the outstanding thesis on multiple sclerosis, La Sclérose en Plaques, 18 and subsequently was nominated Charcot's Chef de clinique for the next five years. Although regarded as the linear successor of Charcot, Babiński became a victim of Bouchard's separation from Charcot. Thus, he has never achieved a faculty position at a French university. 19-21

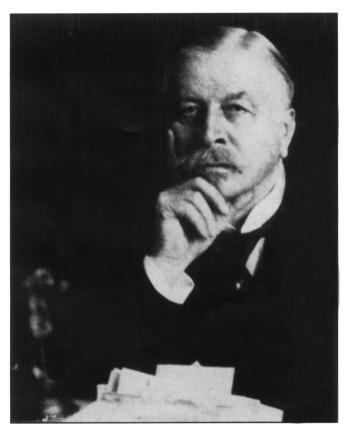


Figure 1: Joseph François Félix Babiński (1857-1932). (From Oeuvre scientifique de Joseph Babinski, Paris: Masson & Cie, 1934;²⁴ with permission).

Instead, he obtained the appointment of *medécin des hopitaux* (physician-in-chief) in the Pitié hospital, very close to the Salpêtriére⁴ (currently, Pitié-Salpêtriére hospital complex). It was in the Pitié hospital, where Babiński was presenting his world-famous Monday lessons, *consultationes externes*, following the tradition of the Charcot's Tuesday Lessons.

After his graduation, Babiński continued to publish three to four papers a year with, ultimately, a bibliography of 288 items.²² His principal contributions were collected and issued in two volumes: Exposé des travaux scientifiques de Dr. J. Babinski²³ and Oeuvre scientifique de Joseph Babinski²⁴ published in 1913 and 1934, respectively. In 1913, Babiński was nominated by a group of the University of Lvov (part of Poland at the time, now Ukraine) professors for the Nobel Prize, but his major scientific contributions were considered by the prize committee to be outdated by 10 years.^{25,26}

HENRI BABIŃSKI

Henri Babiński, Joseph's older brother, became a successful mining engineer and world traveler. During his trips he gained experience in cooking as he had to prepare meals for himself.²⁷ Using the pseudonym of "Ali-Bab," he wrote a cookbook famous in all Paris, *Gastronomie Pratique*, published in 1928.²⁸ Each reprinting of the book, the last one in 1993, continues to be quickly sold out in France. Bailey²⁸ speculated that "Ali" could have stood for "other" and "Bab" for Babiński, thus, making Henri the "other Babiński."

Henri, recognizing the importance of Joseph's contributions into medical sciences, gave up his aspirations and abandoned engineering to assist Joseph in establishing his career. Henri was looking after Joseph and taking care of his finances. The brothers



Figure 2: Joseph Babiński's signature with the slash over the letter 'n' in the spelling of his last name (From the letter to Auguste Tournay dated June 3, 1915; 14 with permission).

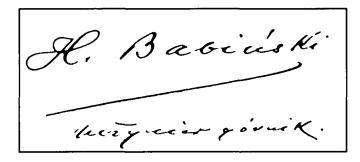


Figure 3: Henri Babiński's (Joseph's brother) signature. Note the presence of the slash over the letter 'n' in the spelling of the last name. Below the signature, 'inzynier górnik' (in Polish) means mining engineer (From the letter, written in Polish, to Dr. Orzechowski; 15 with permission).

became deeply attached to each other and shared the same living quarters during their entire lives, on the third floor of 170 bis Boulevard Haussman. 14 Their apartment consisted of seven spacious rooms and a separate room for their maid. Photographs inscribed by such prominent patients as Spanish King Alfonso XIII and Marshal Petain (contemporary French Battle of Verdun hero) decorated the walls of the apartment. A sizable Ludwig XV style table was located in the middle of the living room, and their mother's photograph and father's bust were suspended from the walls. In addition, Joseph had a large library, and Henri a separate study room. 27

Tournay in his book on Babiński¹⁴ describes Henri and Joseph's love and attachment: "The two brothers were celibate and lived together, having no woman in the house other than the wife of their valet de chambre. When he engaged the couple, Ali-Bab had said to the husband, "Is your wife obedient?" When the response was in the affirmative, they were hired, and the wife was considered to be the cook. That is to say, she was to take her master's book in hand and, working as a preparator according to rule, to carry the prescriptions formulated for the menu".²⁸

LEON BABIŃSKI

One of the distant relatives of Henri and Joseph was Leon Babiński, Polish engineer, who was frequently invited for the celebrated family breakfasts which started always promptly at noon. Leon describes: "I have never seen a man who could consume his meals as fast as Joseph Babiński - this was really something phenomenal. After the breakfast, Joseph stayed in his study room, and the guests proceeded to another room for a cup of coffee or a glass of armagnac. Later (almost two o'clock), together with Henri, we went for a walk ... Henri, soon after we split (after the breakfast walk), directed his footsteps to the apartment of the lady of his heart, a French woman who survived both brothers, and who was present at Joseph's funeral, but for the tact or prudery I was never introduced to her."27 Leon further states: "Both brothers were unmarried but Joseph had three daughters out of wedlock by a woman of Norwegian origin.²⁷ Even though Joseph fathered the daughters, who lived and were raised at the outskirts of Paris", he never gave them his name.



Figure 4: The grave of the Babiński family (bottom of the picture) when visited in 1993.

The brothers' deaths came within a year apart, Joseph following his brother Henri. Their family grave (Figure 4) is located at the small cemetery in Paris suburbs, district of Montmorency. Visited November of 1993, it seemed abandoned. It was very grievous to see that, even though the name of Babiński has never been forgotten in medicine, the inscription of his name on the tomb was hardly discernible.

ACKNOWLEDGEMENTS

We wish to thank APG's wife Kasia for her assistance in the manuscript editing. We would also like to thank the Interlibrary Loan Section of the University of Nebraska Medical Center's McGoogan Library of Medicine for providing the invaluable references (APG).

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