



“Migrânea” or “enxaqueca”? A historical and semantic review

Adriana de Almeida Soares¹, Yasmine Maria Leódido Fortes¹, Wallyson Pablo de Oliveira Souza²,
Raimundo Pereira Silva-Néto^{1,2}

¹Graduate Program in Biomedical Sciences of the Federal University of the Parnaíba Delta, Parnaíba, Brazil

²Federal University of the Parnaíba Delta, Parnaíba, Brazil



Raimundo Pereira Silva-Néto
neurocefaleia@terra.com.br

Edited by:

Marcelo Moraes Valença

Keywords:

Migraine Disorders
Headache
Terminology
Semantics

Introduction

Headache is as old as the emergence of man on earth. A classification for headaches has been suggested for many centuries. After the invention of writing, numerous words were created to designate different types of headache.

Objective

The objective of this review was to discuss the historical and etymological aspects of the terms “migrânea” and “enxaqueca”.

Methods

This study was an integrative review using articles with historical data on the etymology of the terms “migrânea” and “enxaqueca” and their evolution over the years.

Results

The terms “migrânea” and “enxaqueca” have Greek and Arabic origins, respectively. Both describe a neurological syndrome characterized by headache and other associated symptoms. Usually, sufferers of this disease are more familiar with the term “enxaqueca” and confuse it with headache, while health professionals prefer the term “migrânea”.

Conclusions

After so many years that the term “migrânea” has been used, it would be a step backwards to use the term “enxaqueca” again, especially because “migrânea” has been adopted by young neurologists, including those from other specialties.



A Historical and Semantic Review

First descriptions of headaches

Headache is as old as the emergence of man on earth. It is believed that the first man appeared around 4 million years ago and belonged to the genus *Australopithecus*.¹ Only 200,000 years ago, *Homo sapiens* appeared in Africa, giving rise to our species. In the Neolithic Period, around 7,000 BC, it was believed that headaches were a consequence of demonic spirits that took over people. Therefore, as a form of treatment, these individuals were subjected to skull drilling, confirmed in archaeological finds.

The recording of headaches was only possible after the development of cuneiform writing, around 3,500 BC, by the Sumerians. Thus, descriptions of headaches show that migraine is probably the oldest known. Its recognition dates back millennia, according to descriptions found in Sumerian writings and Egyptian papyri.²

In the first centuries of the Ancient Age, despite the existence of writing, there was no alphabet for phonetic recording of any form of headache, including migraine, a word not yet known. Certainly, a revolution in the history of writing was the invention of the alphabet by the Phoenicians, between the 13th and 11th centuries BC, which later gave rise to almost all the others, such as Hebrew, Arabic, Greek and Latin. The latter, the most used in the world, appeared in the 5th century BC, used to write the Portuguese language and most languages in Europe.

In the second century AD, Aretaeus of Cappadocia (120-180) classified headaches into three types: “cephalgia”, a mild and short-lasting pain; “headache”, stronger and longer lasting pain; and “heterocrania”, intermittent pain that appeared at more or less long intervals and affected half of the skull, especially in the frontal and occipital regions. This pain radiated to the temples, supraorbital region and bottom of the orbit. In the same century, the Greek physician Claudius Galenus (129-201), better known as Galen of Pergamum, created the term “hemicrania” (from the Greek “hemi”, half; and “crania”, skull) to define a painful disorder that it affected half of the head, whether on the right or left side.³

The appearance of the word *migraine*

The terms “heterocrania” and “hemicrania” describe a recurrent, unilateral and severe headache and correspond to the disease that we currently call migraine. However, the word *migraine* derives directly from the Greek term *hemicrania*, created by Galen. This word would have undergone transformations, over time, in many countries, generating the word “*migraine*”, in French. After the Norman invasion of England, in the 11th century, the dominated assimilated the language of the dominant and the term “migraine” generated, in Old English, the

word “*megrin*”. The English, at the beginning of the 20th century, abandoned the term “*megrin*” and adopted the word “migraine” to refer to the same disease.³

Migraine is also popularly known as “enxaqueca”, which has Arabic origins. It comes from the terms “*shakika*” or “*sagiga*”, which mean “half of a whole” or “broken in half”, referring to the fact that this type of pain occurs, most frequently, only in half of the skull.³

Avicenna was an Arab doctor from the 13th century who had the same value as Galen for Westerners. He used the terms “*shakika*” and “*sagiga*”. The words “*shakika*” or “*sagiga*” were created when the Iberian Peninsula was under the rule of the Moors and, therefore, easily passed into Spanish, with a modified pronunciation, being called “*jaqueca*”. As it is contiguous to Spain, Portugal assimilated the term “*jaqueca*”, transforming it into the Portuguese word “*enxaqueca*”.³

From then on, there is a divergence, as only native Portuguese speakers and Spanish speakers use the words from “*shakika*” or “*sagiga*”, respectively, “*enxaqueca*” and “*jaqueca*”. In the rest of the world, a term derived from “hemicrania” is spoken, with the radical “*migr*” predominating. Although, in the middle of the 20th century, Spanish speakers adopted “*migraña*” and Brazilians, “*migrânea*” (Table 1).³

Table 1. Study synthesis

Country	Population
People who talk about “enxaqueca” (3.5%)	288,613,771
Brazil	203,080,756
Mozambique	34,360,668
Angola	36,760,858
Portugal	10,031,442
Guinea Bissau	2,137,011
East Timor	1,427,333
Cape Green	579,504
Sao Tome and Principe	236,199
People who do not speak “enxaqueca” (96.5%)	7,853,618,529

Source: IBGE; <https://countrymeters.info/en>

In the Latin alphabet, the word *hemicrania* has 24 different but similar spellings, and in 91.7% of them, the radical “*migr*” is maintained. The spellings are as follows: *emicrania*, *emigranja*, *meigryn*, *migræne*, *migrain*, *migraine*, *migrän*, *migraña*, *migrâne*, *migranya*, *migreen*, *migreeni*, *migrén*, *migrèn*, *migrena*, *migrenä*, *migréna*, *migrëna*,



migrene, migrenë, mígreni, migreno, migrény.

In Brazil, since the arrival of the Portuguese in 1500, the word "enxaqueca" has always been in the public domain, referring to any type of headache, including migraine. Over the years, with its popularization, the term "enxaqueca" continued to be used incorrectly. Patients with migraine disease stated that they had, for example, "enxaqueca" almost daily.

In this context, the term "enxaqueca" was and continues to be used as a symptom, that is, headache. There has always been widespread misinformation from doctors that migraine is a syndrome, in which headache is one of the symptoms, along with nausea, vomiting, photophobia, phonophobia and osmophobia.⁵

Only from 1956, with the beginning of studies on headache by Professor Edgard Raffaelli Júnior, in Latin America, migraine began to be seen in a different way, with characteristic signs and symptoms. To eliminate existing doubts, Raffaelli decided, in 1984, to translate the word migraine into Portuguese, creating the word "migrânea". Thus, "enxaqueca", in the sense of disease, would be called "migrânea"; and "migranoso", from "migraineurs".⁶⁻⁹

In his arguments, Raffaelli highlighted that the important thing in the translation would be to respect the characteristics of the headache and not the words themselves and that using, in Portuguese, "migrânea" and "migranoso" would not constitute an attack on the native language, but a neologism with historical support. Furthermore, there was the intention of improving the understanding of texts in English, in which migraine was always written. Therefore, with this translation, migraine and "migrânea" would be cognate terms, that is, words with the same etymological origin and similar spellings, as both derive from the same root, the word "hemicrania".⁶⁻⁹

Migraine and "enxaqueca": why the controversy?

From 1984 onwards, the two terms, "migrânea" and "enxaqueca", continued to be used in Brazil. However, "migrânea" seems to have a more scientific connotation, characterizing the disease more, while "enxaqueca", a popular expression.⁸

As it is a scientific term, many patients are unaware of its meaning, and it is up to doctors to teach it to their patients; and to professors at medical schools, to their students. As with other diseases, for example, "catapora" is more popular than varicella, the words "enxaqueca" and "migrânea" will always exist, and it is up to the doctor to know how to distinguish the symptom from the disease.

In Brazil, words from other languages are commonly introduced into Portuguese, characterizing foreignness. This incorporation occurs for several reasons, mainly due to technological advances, increasing globalization, proximity to speakers of other languages and the natural process of cultural assimilation. Obviously, there will always be xenophobic defenders of linguistic self-esteem. When creating the term "migrânea", Raffaelli used a Gallicism or Anglicism, borrowing a word, respectively, from the French or English language. To this end, he brought a new foreignism with phonological and graphic Portuguese. In fact, he created a semantic consensus, generating harmony in writings in Portuguese.^{6,7}

There is usually a lot of criticism of Gallicism and Anglicism, but there is no disagreement with Latinism. Those who defend the term "enxaqueca" forget its Arabic ("shakika" or "sagiga") or Spanish ("jaqueca") origin, constituting yet another foreign term.¹⁰

The argument that the term migraine makes communication with the population difficult ignores the fact that the adoption of the technical term "migrânea" does not exclude the use of the colloquial term "enxaqueca", just as the use of the term "nephrolithiasis" does not prevent use the popular expression "kidney stones".¹⁰

Conclusion

After so many years that the term "migrânea" has been used, it would be a step backwards to use the term "enxaqueca" again, especially because "migrânea" has been adopted by young neurologists, including those from other specialties. In fact, a parallel can be drawn with the expression "cefaleia em salvas", another successful creation by Raffaelli, already incorporated into the medical vocabulary.

Contribution authors: All authors had the same contribution.

Funding: No

Conflict of interests: The authors report no conflict of interest.

Adriana de Almeida Soares
<http://orcid.org/0000-0001-7002-6458>

Yasmine Maria Leódido Fortes
<http://orcid.org/0000-0001-9642-0330>

Wallyson Pablo de Oliveira Souza
<http://orcid.org/0000-0003-3122-9484>

Raimundo Pereira Silva-Néto
<http://orcid.org/0000-0002-2343-9679>

References

1. Madisonv P and Wood B. **Birth of Australopithecus.**



- Evol Anthropol* 2021; 30(5):298-306 Doi:10.1002/evan.21917
2. Gordin S, Gutherz G, Elazary A, Romach A, Jiménez E, Berant J, ... and Cohen Y. **Reading Akkadian cuneiform using natural language processing.** *PLoS One* 2020; 15(10): e0240511 Doi:10.1371/journal.pone.0240511
 3. Silva-Néto RP. **Cefaleia: aspectos históricos e tópicos relevantes.** Halley: Teresina, 2013.
 4. Population of the world and countries. Available in: <<https://countrymeters.info/en>> Accessed on: 14 Dec. 2023.
 5. Headache Classification Subcommittee of the International Headache Society (IHS). **The International Classification of Headache Disorders, 3rd edition.** *Cephalalgia* 2018; 38(1): 1-211 Doi:10.1177/0333102417738202
 6. Raffaelli Jr E. Nomenclatura em cefaléias. In: **Disfunções autonômicas das cefaléias. 48^o Encontro de Especialistas.** Serviço de Informação Ache, São Paulo, 1984; 61-64.
 7. Raffaelli Jr E. **A semântica das cefaleias: retrospectiva histórica.** *Migrêneas e Cefaleias* 2004; 7(2): 70-72.
 8. Silva-Néto RP. **Quem foi Edgard Rafaelli Júnior.** *Migrêneas e Cefaleias* 2006; 9(4): 152-158.
 9. Silva-Néto RP. **The study of headache in the 1950s in Latin America by Edgard Raffaelli Júnior (1930-2006).** *Headache* 2015; 55(5): 713-717 Doi:10.1111/head.12578
 10. Kowacs F, Roesler CAP and Silva-Néto RP. **“Migrânea” and “enxaqueca”: not opposite, but complementary words.** *Arq Neuropsiquiatr* 2021; 79(3): 248-250 Doi:10.1590/0004-282X-ANP-2020-0292