



## Headache Phenotypes in Idiopathic Intracranial Hypertension: Analysis of Tertiary Hospital in Fortaleza/CE

Matheus da Costa Guedes<sup>1</sup>; João Gabriel Dias Brasiliense Frota<sup>1</sup>; Rhina de Freitas Sampaio<sup>1</sup>; Alliane Milliane Ferreira<sup>1</sup>; Gabrielle Benevides Lima<sup>2</sup>; Robson Caetano Guedes Assunção<sup>3</sup>; Gabriela Moreira Bezerra Lima<sup>3</sup>; Morgana Feitosa de Queiroga<sup>1</sup>; Pedro Rubens Araújo Carvalho<sup>1</sup>; Lucas Antônio Martins Lira<sup>4</sup>; Pedro Vinicius da Silva Neri<sup>1</sup>; Ian Silva Ribeiro<sup>1</sup>; Mário Hermes Rios França<sup>1</sup>; Raimundo Neudson Maia Alcantara<sup>1</sup>; Norberto Anizio Ferreira Frota<sup>1</sup>

1. Hospital Geral de Fortaleza, Fortaleza - CE - Brazil;
2. Universidade de Fortaleza, Fortaleza - CE - Brazil;
3. Universidade Federal do Cariri, Fortaleza - CE - Brazil;
4. Centro Universitário Christus, Fortaleza - CE - Brazil.

**Categoria:** Cefaleias Secundárias

### Introduction

Headaches in Idiopathic Intracranial Hypertension (IIH) are prevalent in approximately 90% of the patients. It is the main symptom of the disease. This constant pain significantly is determinant to the patients quality of life. The International Classification of Headache Disorders version 3 beta (ICHD-3b) diagnostic criteria for headache attributed to IIH do not specify a particular headache phenotype but require at least two of the following characteristics in a patient with a diagnosis of IIH and a documented lumbar puncture opening pressure of  $\geq 250$  mm of water: (1) the headache developed in temporal relation to IIH, or led to its discovery, (2) headache is relieved by reducing intracranial hypertension, and (3) headache is aggravated in temporal relation to an increase in intracranial pressure.

The headache phenotype can mimic primary headaches, such as migrainous-type headache or tension-type headache, but the history is accompanied by pattern or frequency change or suggesting a secondary headache. It also can be a new headache onset, with the description of global headache, chronic and daily worsening in the morning and exacerbation by coughing or with valsalva-like maneuver. In some cases, it may overlap with previous primary headaches.

### Objective

This work aims to present the different phenotypes of headache presentation in patients with IIH in a tertiary hospital in Fortaleza, Ceará.

### Methodology

This is a cross-sectional study in which data were obtained by medical interview and were made qualitative and quantitative analysis of medical records. It utilized Headache Impact Test-6 (HIT 6) and headache diary to assess headache intensity and frequency. For diagnosis of headaches phenotypes were utilized International Classification of Headache Disorders (ICHD-3). Approved by the ethics committee, among the 22 patients followed in the specialized outpatient clinic at a tertiary hospital, met the diagnostic criteria for IIH according to the 2013 Friedmann criteria. Among these, we were able to interview 17 patients. Our sample consisted entirely of female patients with a mean age of 38 years, ranging from 27 to 55 years. The mean follow-up time was 4 years. The mean opening pressure measurement at diagnosis was 37.18 cm H<sub>2</sub>O.

### Results

From our sample, the initial clinical picture occurred in 70% (N=12) as migraine with signs of chronification, 18% primary exercise-like headache (N=3), and 12% (N=2) with other phenotypes. As for the previous headache phenotype, 70% (N=12) presented some form of headache, of which 83% were episodic migraine. Around 30% (N=5) did not meet criteria for primary headache. Regarding the current predominant phenotype after follow-up: 30% (N=5) were of episodic migraine, while 23% (N=4) had chronic migraine, 17% (N=3) primary exercise-like headache, and 30% (N=5) had other headaches. Concerning the frequency of headaches, 70% (N=12) experience less than fifteen headache days per month, and 30% (n=5) still have fifteen or more headache days per month. As evidenced by the HIT-6 questionnaire, 52.94% (n=9) reported severe impact, 11.76% (n=2) moderate impact, and 35.29% (n=6) mild impact.

### Conclusion

A enxaqueca com sinais de cronificação foi o fenótipo mais observado na apresentação inicial. Identificamos também que a maioria da amostra tinha dores de cabeça anteriores e em 83% delas era uma enxaqueca episódica. Reforçando a importância da realização de exame oftalmológico e pesquisa de outros sintomas de HII em pacientes com enxaqueca prévia que apresentam sinais de cronicidade, principalmente do sexo feminino e que relatam ganho de peso. Embora a apresentação diária não tenha sido a frequência mais comumente relatada, o impacto severo da dor pode contribuir para a incapacidade. Além disso, a cefaleia sobreposta mais frequente foi a enxaqueca episódica, o que pode estar relacionado à dificuldade de controle da dor nesses pacientes devido aos diversos fatores fisiopatológicos da dor.

**Keywords:** Hipertensão Intracraniana Idiopática; Enxaqueca Episódica; Cefaleia Red Flag; Cefaleia Crônica.