Headache frequency among 71,267 admissions to an adult medical emergency in the city of Recife in 2021

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Introduction
Pain is a warning sign that can mean great suffering and risk of death, and makes the patient seek a medical emergency for evaluation by specialists.

Objective
To verify the frequency of patients with headache disorders among those with pain admitted to the emergency department of a private hospital in Recife, Brazil, during the year 2021, using the international classification of diseases (ICD).

Methods
This is a retrospective study. The authors used the Business Intelligence (BI) tool to verify the number of admission by the ICD 10 recorded in 2021 in the emergency room of Hospital Unimed Recife III. The sample described in this study covers only the ICDs that had the word DOR (pain in Portuguese) or pain be the main symptom of the condition represented by the respective ICD.
We selected only ICDs used in at least five admissions in 2021 (January to December), independent of readmission of the same patient.

Results
There were 71,267 consultations in 2021 using 2,296 different ICDs. Of these, the Headache (CEFALEIA) ICD was the 6th most frequent (n= 2,121) behind the following ICDs: Unspecified viral infection (n=4,327); Influenza with other respiratory manifestations, due to unidentified virus (n=3,335); Respiratory infection by the new coronavirus (Covid-19) (n=2,927); Low back pain (n=2,759) and Diarrhea and gastroenteritis of presumptive infectious origin (n=2,739). In 27,853/71,267 (39.1%), the consultations were related to pain in any part of the body (with 258 ICDs). In the group of patients with pain of traumatological, orthopedic, or rheumatic origin, there were 10,148 consultations (142 ICDs); Abdominal or pelvic pain (5,675, with 23 DICs); Spinal pain (3,805, with 10 ICDs); and Chest pain, including coronary ischemia (1,786, with 10 ICDs).
Twenty-eight different ICDs (4,314 admissions/71,267 total admission, 6.05%) were used to classify patients who reported some type of headache, e.g., Headache (CEFALEIA, n=2,121), tension-type headache (n=363), migraine without specification (n=232), migraine without aura (n=128), other forms of migraine (n=100), migraine with aura (n=85), complicated migraine (n=29), chronic post-traumatic headache (n=18), other specified headache syndromes (n=14), atypical facial pain (n=11), trigeminal neuralgia (n=7), herpes zoster ophthalmicus (n=5), and benign intracranial hypertension (n=5). Neck pain (n=595), torticollis (n=203) and temporomandibular joint disorders (n=43) were other ICDs included. Twelve ICDs (n= 355) were related to head trauma, a condition in which pain is common.

Conclusion
Of all patients assisted in the emergency department of Hospital Unimed Recife III, 6.05% received ICD that represented diseases with headache as a symptom. At least 39% of patients treated at the Unimed Recife III emergency room in 2021 reported some type of body pain, and the headache was the second most reported type of pain, coming after low back pain. Most patients who received the diagnosis of Covid-19 suffered from headaches. Thus, this analysis must be underestimated. The ICD of admission is not always the same at the moment of hospital discharge; a definitive diagnosis is often confirmed during the investigation.

Keywords: Emergency, International classification of diseases, Headache, Migraine, Pain.