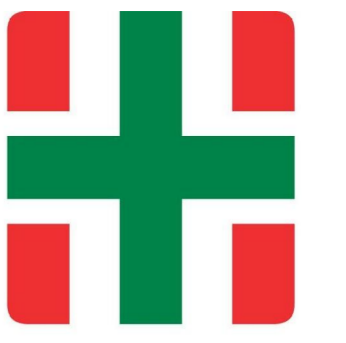




Instituto Universitario
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Primary Headaches at the Emergency Center in a Third Level Hospital in Buenos Aires, Argentina



HOSPITAL ITALIANO
de Buenos Aires

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INTRODUCTION

Headaches are among the most frequent causes for emergency department (ED) visits worldwide. They are thought to be 1-4% of appointments.

In the United States during 2010, headaches represented 2.1 million ED visits (2.2% of total visits). In this work³, neuroimaging studies were performed on 14% of patients, with only 5.5% being pathological. Of the 2% of patients who underwent a lumbar puncture, only 11% were pathological.

We found no epidemiological data on emergency care of patients with primary headaches in our country.

OBJECTIVE AND METHODS

Our objective was to describe the number of visits, epidemiological characteristics of this population, frequency and types of complementary studies performed and medication requested during these visits.

We conducted an observational retrospective cohort study of all primary headaches consultations presented by +18 year-old patients in ED of a tertiary care hospital center in Buenos Aires during 2017.

Hospital Italiano of Buenos Aires is a third level Hospital, its ED is divided into 4 main sectors (Critical care, intermediate care, urgent care, and walk-in clinics) and 6 specialty retail clinic (Ophthalmology, Gynecology, Otolaryngology, Traumatology, Surgery and Psychiatry). 97% of the population is white and European descents, 3% belong to other ethnicities. All clinical and administrative information are collected and stored in a single centralized electronic clinical record (ECR).

The Internal Medicine and Medical Informatics Research Area was requested to list the emergency center records containing the words "headache", "migraine", "headache", "facial pain" or "neuralgia" in discharge diagnosis. To avoid inclusion of secondary headaches, we select discharge diagnosis instead of admission diagnosis.

We collected data on age, sex, health care coverage, number of consultations per patient, waiting and attention times, comorbidities, history of headaches, diabetes, dyslipidemia, smoking, hypertension and epilepsy. Data was also collected on the area of care, the type of discharge, the medication received and the complementary studies that were requested.

RESULTS

A total of 3554 consults from 3120 patients have been included in the present study. Of those, only 9.2% (n=252) attended the ER 2 or more times. The average age of patients was 42 years old (IIQ 30-59) and 70.7% (n=2205) were women (figure 1). A history of headaches was found in 93% (n=2905) of patients, migraine in 21.8% (n=680) and trigeminal neuralgia in 2.15% (n=65) (figures 3 and 4). Most of patient were triaged to the lowest level of complexity (70.6%, n=2509) (figure 2). The health insurance more commonly used by patients was the one provided by the institution's own HMO (55%, n=1954).

Administration of medication was not required in 52% (n=1873) of consultations. In 1681 episodes, 3832 drug dosages were administered (2.3 treatment/episode). The most common route of administration was intravenous (71.5%, n=2739) (figure 5).

Complementary studies were carried out in 22% (n=766) of cases (figure 6). Patients stayed in the ED an average of 139 minutes (IIQ 87-217). Lastly, 1% (n=35) was hospitalized after ED evaluation (figure 7).

Figure 1. Description of the population

3554 visits
3120 patients

7.5% (n=235) visit ER twice
2% (n=71) visited over 3 times

70.7% n=2205
29.3% n=915



Figure 3. Comorbidities reported in ECR previous to visit

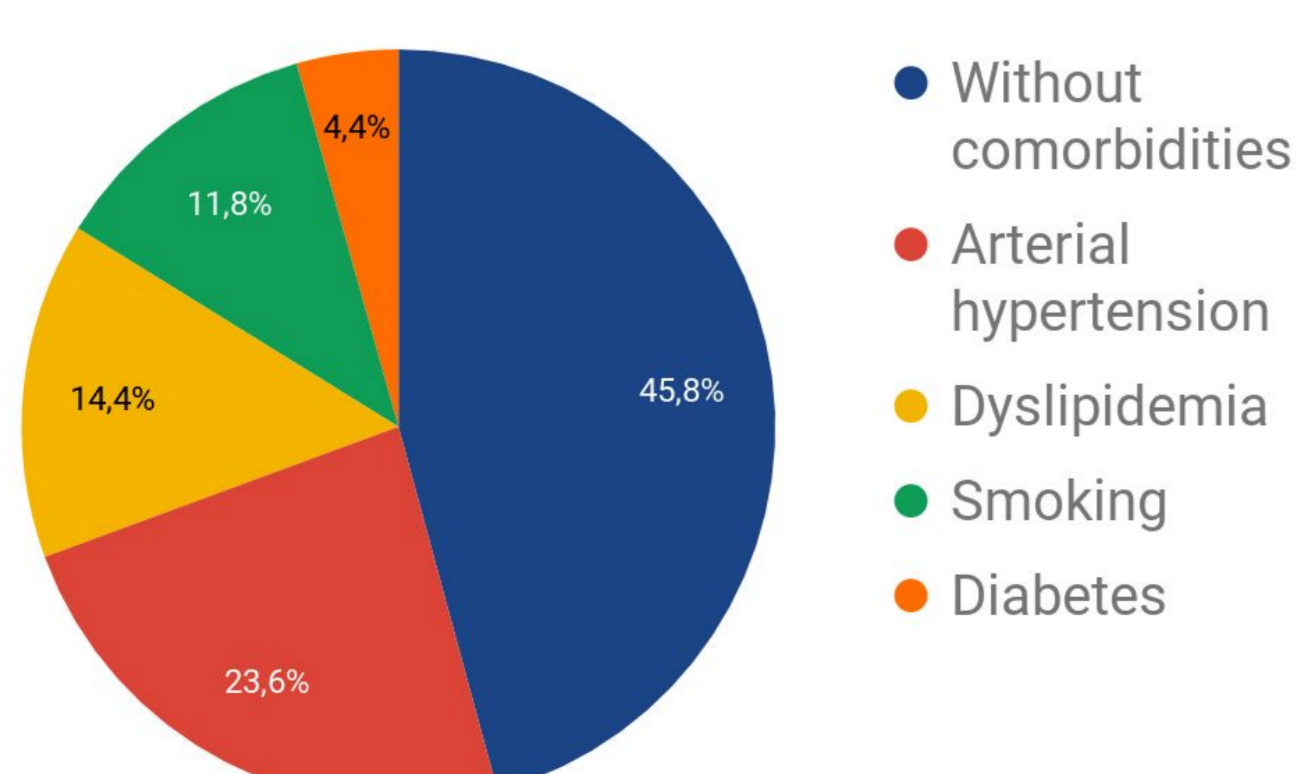


Figure 2. Attention areas and frequency of headache visits

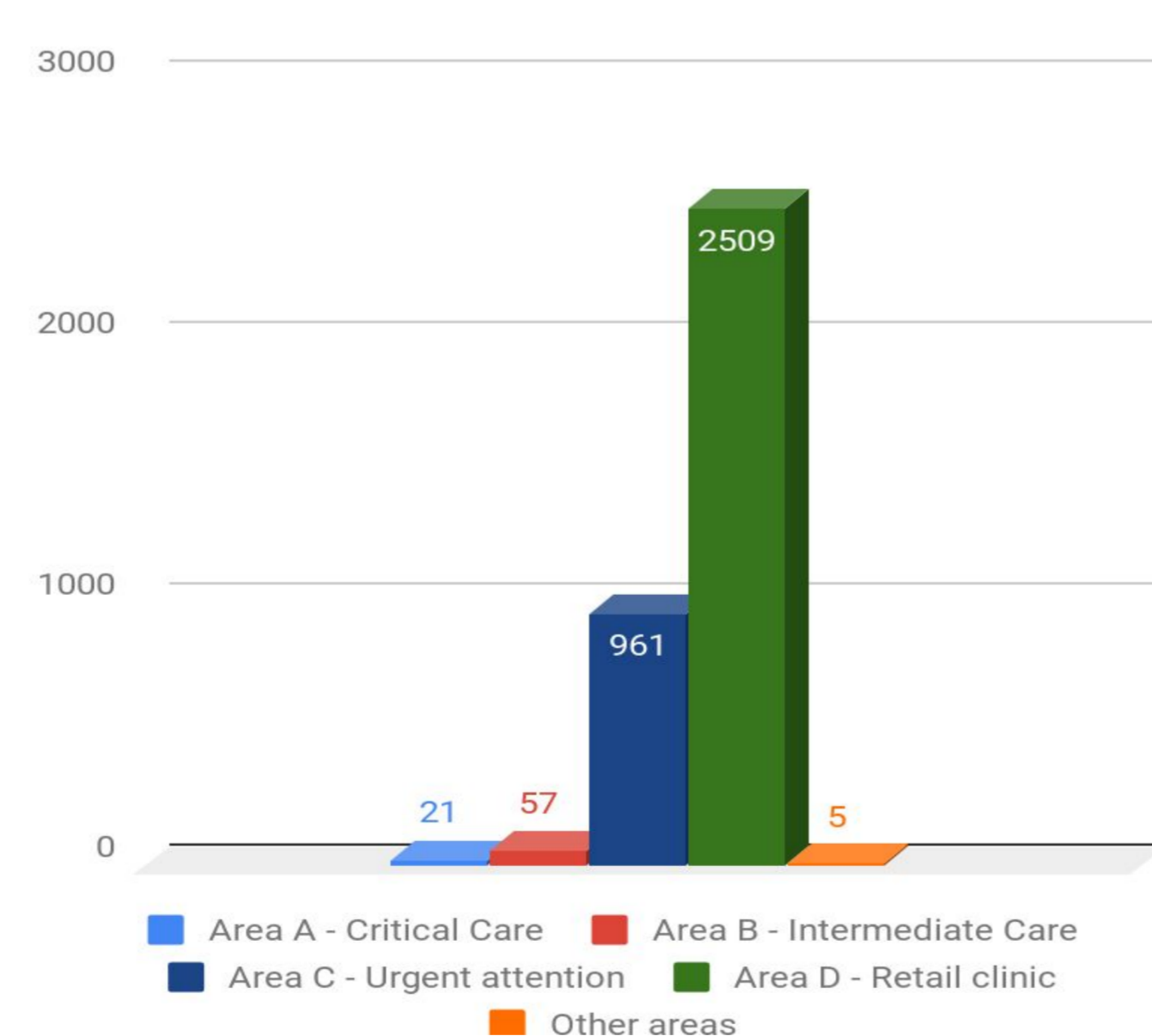


Figure 4. Types and frequency of primary headache reported in ECR

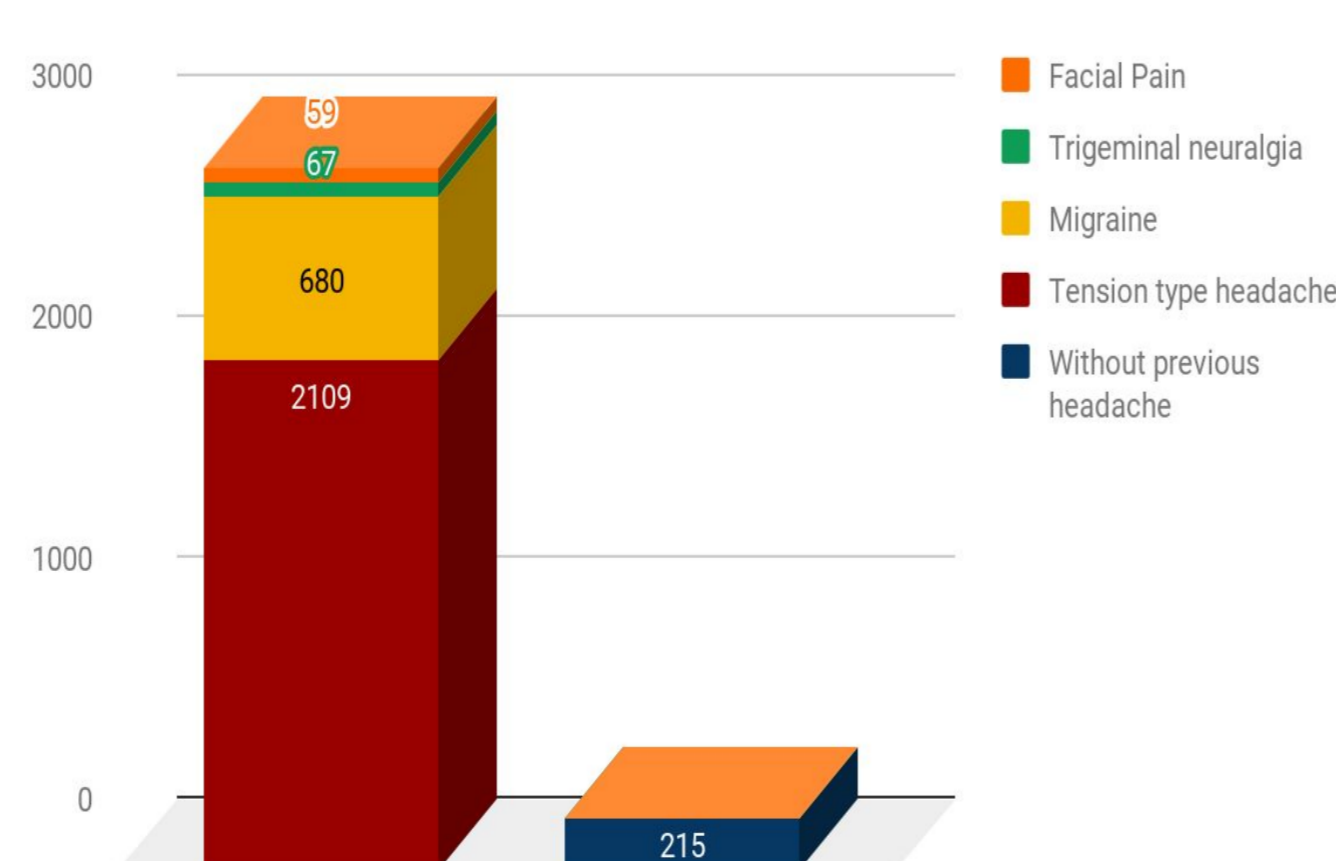


Figure 5. Percentage of patients receiving medication, type and frequency of drugs administered

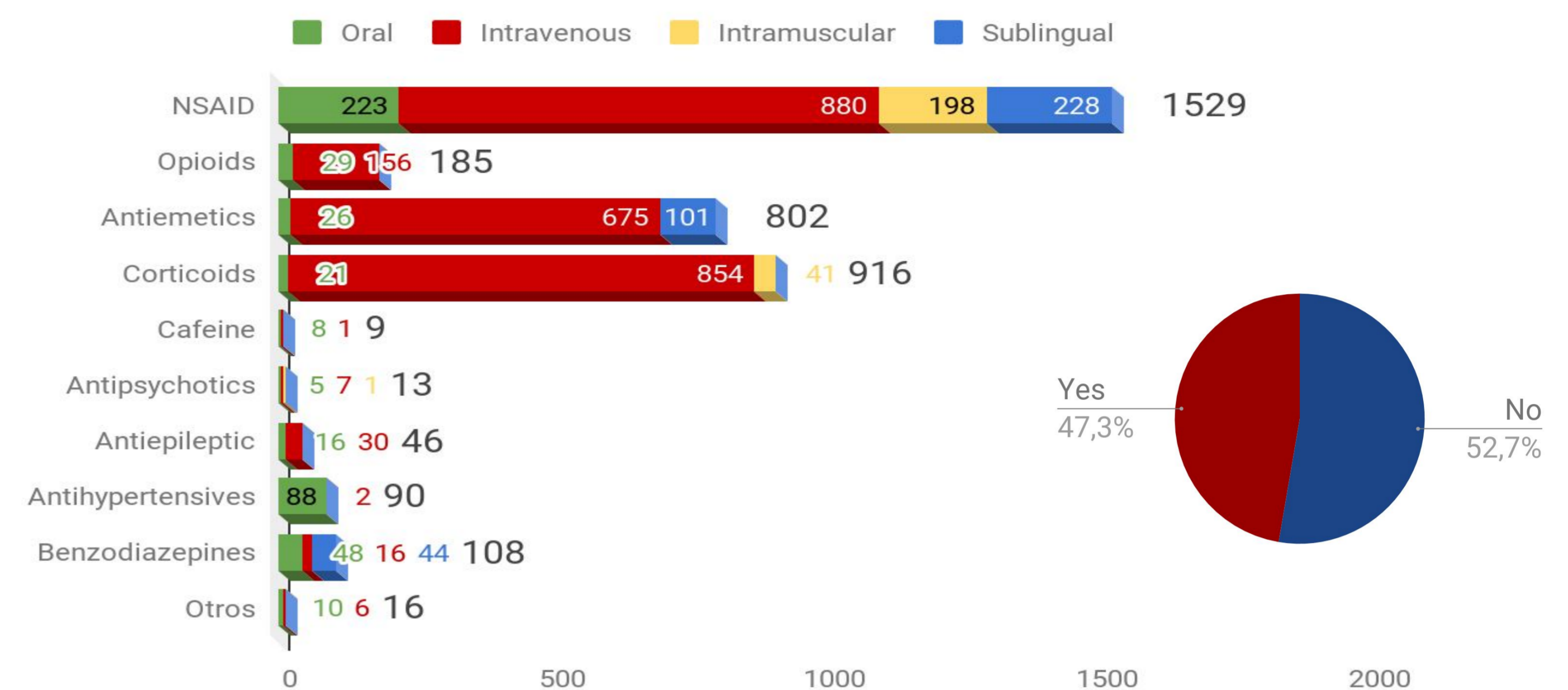


Figure 6. Types and frequency of complementary studies made at visit

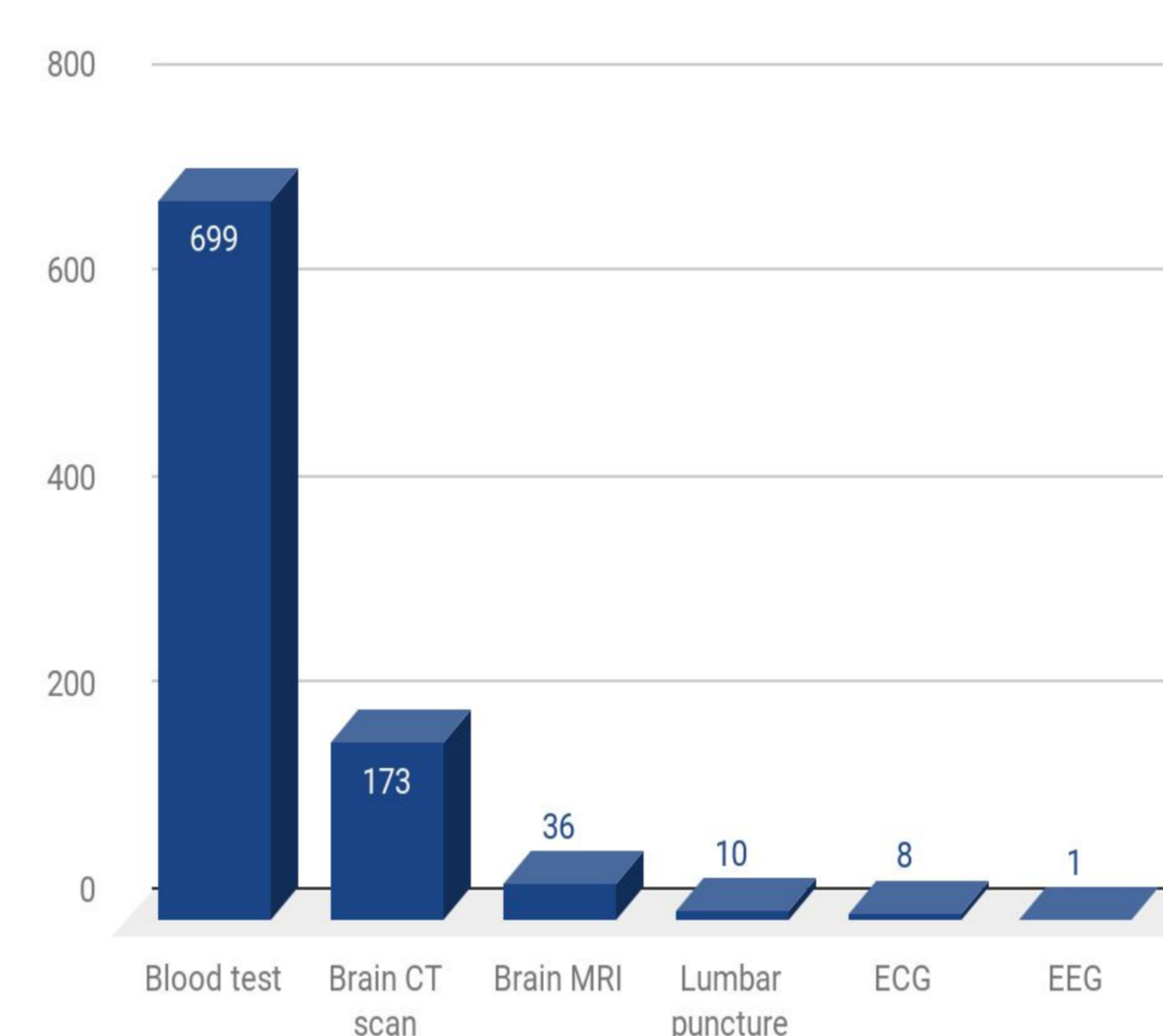


Figure 7. Type of discharge

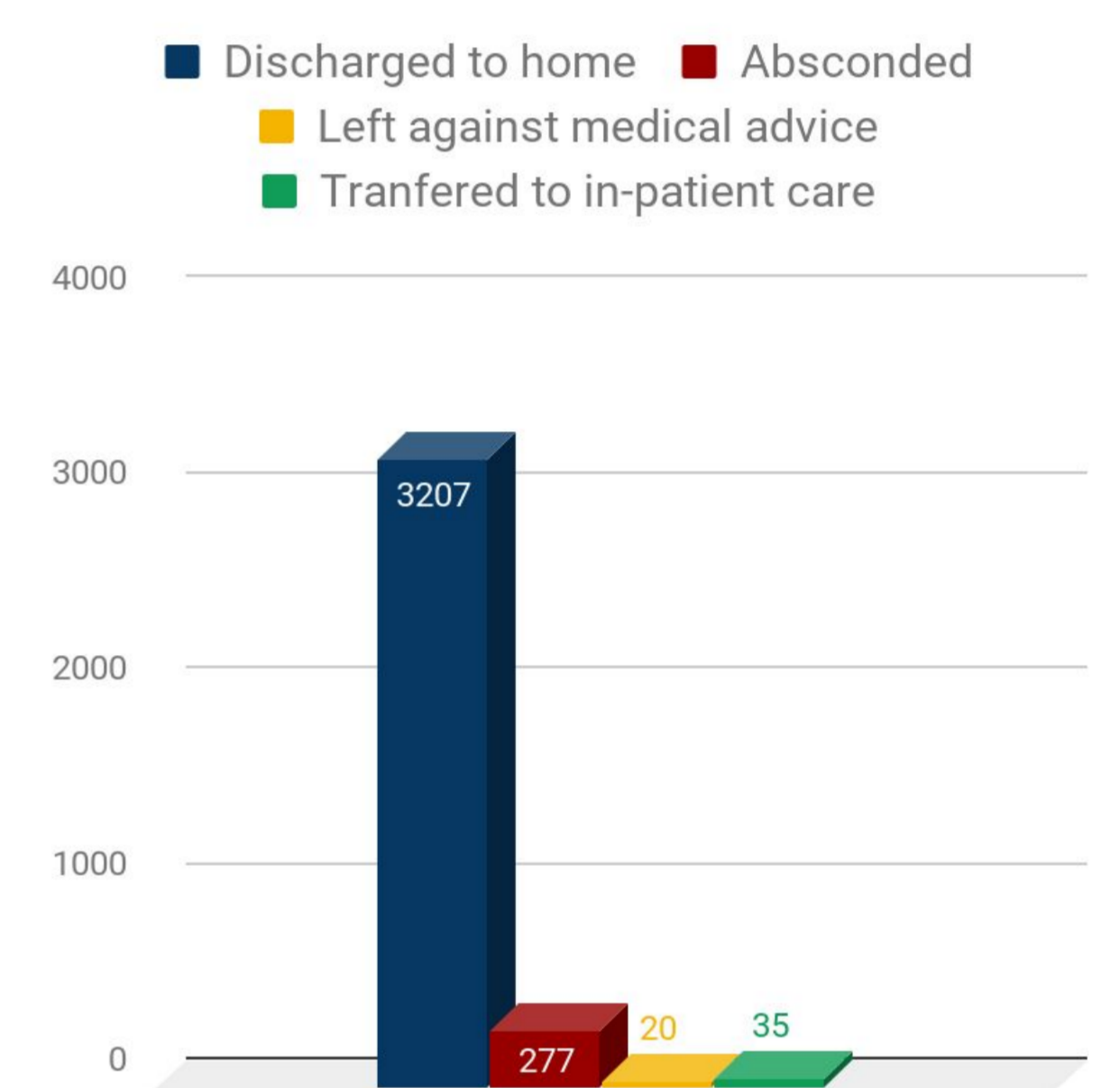


Table 1. Diagnosis assigned at discharge (n = 3554)

Diagnósticos de Egreso	Frecuencia	Porcentaje
No specific headache	2177	61.25%
Migraine	538	15.14%
Tension type headache	502	14.12%
Trigeminal Neuralgia	113	3.18%
Frontal Headache	86	2.42%
Mixed headache with contracture	43	1.21%
Occipital Headache	20	0.56%
Cluster Headache	19	0.53%
Other Neuralgias	13	0.37%
Refractory headache	8	0.23%

CONCLUSIONS

- Our ED receives over 150,000 visits a year, our study population represents the 2.33% of total visits. Although primary headaches are very common in general population, they were not as frequent as we expected. This could be underestimated by the retrospective design, possible under-registration of doctors in discharge diagnosis, or that most of patients have several care alternatives to avoid overuse of the emergency service.
- Regarding the use of acute therapy, it is much lower than expected, under 50% of the consults. Also, is striking the frequent use of corticosteroids, opioids, preventive medication and other alternatives such as digestive or antihypertensive drugs such as headache treatment.
- Most of our patients were discharged with a nonspecific diagnosis.
- Complementary studies carried out was greater than what has been reported in other centers, none of the studies showed alterations.
- Probably, a high proportion of consults reported here could have been done through outpatient clinics.
- Although the results yielded by this research are comparable to those found in other studies on headaches in ED, this one is the first one carried out on our context.
- Continuing medical education is essential to improve the classification of primary headaches in CE and avoid unnecessary studies.

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Disclosures: This poster has been previously presented at the 56th National Argentinian Congress. October, 2018.



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