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Research Article

Clinical, Paraclinical and Therapeutic Aspects of Headaches in the Neurology and Internal Medicine Departments of the National Hospital of Niamey

Fatimata Hassane Djibo[1,3]*, Maman Daou[2,4], Moudassir Mahamat Ahmat[1,2], Seyni Issa Ousmane[1], Souleymane Brah[2], Amadou Hasane Aboubacar[2], Kelani Aminath Bariath[4], Djibo Douma Maiga[4] and Eric Adehossi Omar[4]

[1]*Department of Neurology of the Nation Hospital in Niamey, Niger*

[2]*Department of Internal Medicine of the National Hospital of Niamei, Niger*

[3]*Department of Neurology of Amirou Boubacar Hospital DIALLO, Niger*

[4]*Faculty of Health Sciences of the University of Abdou Moumouni in Niemey, Niger*

***Corresponding Author:** Fatimata Hassane Djibo, Department of Neurology of the Nation Hospital in Niamey, Niger.

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Abstract

Introduction: Headaches are one of the most common symptoms, which lead the patient to consult a general practitioner but also a specialist and in particular a neurologist.

These are generally subjective manifestations that only the patient can express.

Object: To determine the clinical, paraclinical and therapeutic aspects of headaches.

Results: This is a retrospective study of 207 cases at the Niamey National Hospital from January 1, 2017 to December 31, 2018. A female predominance with a rate of 69.1% and sex ratio M / F = 0.4; the average age of our patients was 41 years with extremes of 10 and 91 years. The most represented age group was that of 31 to 40 years (20.3%) against (13%) for that of 21 to 30 years. Primary headaches predominated (53.1%) with a predominance of migraine and also predominated in women (34.8%). Secondary headaches (46.9%). Headaches of moderate intensity were the most common at 4.3%. Frontal headaches were the most represented with 95 cases, i.e. 45.8%, temporal in 9.1% of the cases with a pulsatile pain type (30.4%). The accompanying signs were sensitometer deficits and dizziness in 6, 3% each, nausea followed by photophobia (2.4%). Secondary headache stroke predominated with a rate of 11.1%. Brain scan was the most requested examination. Analgesics were used, then anti-inflammatories. Paracetamol is the first line treatment, followed by NSAIDs, antiepileptics and tricyclic antidepressants.

Conclusion: Headache is a very frequent reason for consultation in our context, which remains a very complex approach for the clinician. It can be a specific semiological entity, it is then called primary headache, or be then sign of a potentially serious or even fatal underlying pathology, it will then be called secondary headache.

Keywords: Headache, Clinical Aspect; Paraclinical; Treatment

Introduction

Headaches, commonly referred to as headache, are one of the most common symptoms, which cause the patient to consult the generalist but also the specialist and in particular the neurologist [1]. These are, in a general way, subjective manifestations that only the patient can express. The most common functional sign is pain that is not a measurable entity in itself [2]. This pain is most often due to tissue damage responsible for the stimulation of nociceptive peripheral receptors in an intact nervous system. It can also be secondary to an abnormal injury or activation of the sensory pathways of the central or peripheral nervous system [3].

Although they are disabled in the daily life of patients, the diagnosis is mild in the vast majority of cases. However, some headaches may reveal serious pathologies involving vital or functional prognosis [4-6].

In the first place, it is very important to clarify the characteristics of the pain and the accompanying signs in order to distinguish between primary headaches that do not require imaging examination and whose most common causes are migraines and tension heads, from secondary heads attributed to an organic cause and requiring more in-depth exploration. If secondary or symptomatic headaches are suspected, imaging plays a very important role in the etiological assessment.

Since 1988 and the work of the international Headache Society, the clinician has, through the international Classification of Head Disorders [3], a semiological reference that allows him to have a diagnostic orientation according to the types of headaches, the latter was updated in 2004 and a 3rd edition is currently in beta version increasingly refining the diagnostic criteria of the headache.

The professional recommendations, published by HAS, among others [4], on the care of headaches are also becoming increasingly precise, in particular in terms of the use of supplementary examinations such as imaging [7], which should be used wisely, in order not to ignore a serious pathology but not to use it systematically.

Headache is a public health problem, both in terms of the quality of life of patients suffering from it [1.5.6] and in cost terms [8.9].

Despite the advances in medical research with the advent of new molecules such as triptans, antidepressants and the establishment of new treatment protocols that have renewed the therapeutic approach to headache, much remains to be done to prevent it.

No clinical, para-clinical, or therapeutic aspects of headaches have been studied to our knowledge in Niger, which motivated this work.

Methods

This is a retrospective study of patients who consulted the neurology and internal medicine departments of the National Hospital of Niamey on the grounds of headaches and for which we recovered the files, then submitted these files to the questionnaire established. It was completed from January 1, 2017 to December 31, 2018, which is 24 months. Initially, it concerned all patients received at the external consultation of neurology of the National Hospital of Niamey (HNN) from January 1, 2017 to December 31, 2018, i.e. 2 years. This consultation took place only two (2) days a week, receives the different neurological cases referred by the health formations of the country and also cases from other hospitals in Niamey. In a second phase, the study involved internal medicine external consultation registers and enabled us to record the cases of headaches recorded throughout the study period.

Inclusion criteria

Patients who had consulted neurology or internal medicine for headaches or patients received in consultation as part of their follow-up after leaving the hospital were included.

Non-inclusion criteria

Patients without headaches and patients with a trauma to the head were not included in the study.

The variables of the study were sociodemographic variables (age, sex, profession, origin, educational level...), the background (personnels et familiaux). Clinical variables (period of occurrence, location, associated symptoms...). Paraclinical variables (scanner, MRI, blood count...). Therapeutic variables (medicines taken,...).

The collection was carried out using a data sheet containing: (Identity of the patients, age, sex, examinations performed, diagnosis made, treatment undertaken.

Methods of data processing and analysis

The creation of the data mask was carried out with the help of the software Excel which allowed to analyze them by referring to the objectives that we set ourselves for the work. The data collection sheet and data were entered and processed with the Word and Excel 2007 software. Analysis was done using SPSS version 20.

The difficulties encountered were the lack of certain data on the identity of patients and the characteristics of headaches in the consultation registers, the inability for some patients to access additional examinations, in relation to the cost of these examinations.

Results

Our source of data is represented by the external consultation registers of Neurology and Internal Medicine. During this study, we recorded 207 cases of headaches and all the records were exploitable.

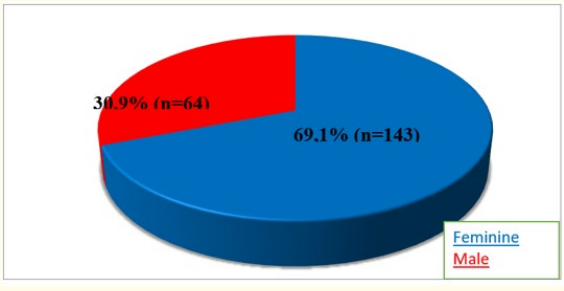

Figure 1: Gender distribution of patients.

Headache type	Sex		Total
	Female	Male	
Primary	**75**	35	110
Secondary	68	29	97
Total	143	64	207

Table 1: Sex distribution of headache type.

The female sex is the most affected by primary headache with 75 cases.

Localization	Staff	Percentage (%)
Frontal	95	45,8
Thunderstorm	19	9,1
In a helmet	16	7,7
Occipital	10	4,8
Hemicranie	6	2,9
In helmet and headlamp	2	1,0
Frontal and occipital	2	1,0
Temporal and occipital	1	0,5
Bitemporal	1	0,5
Vertex	1	0,5
Not specified	54	26
Total	207	100,0

Table 2: Distribution of patients by headache location.

Frontal headaches were the most common with 95 cases or 45.8%.

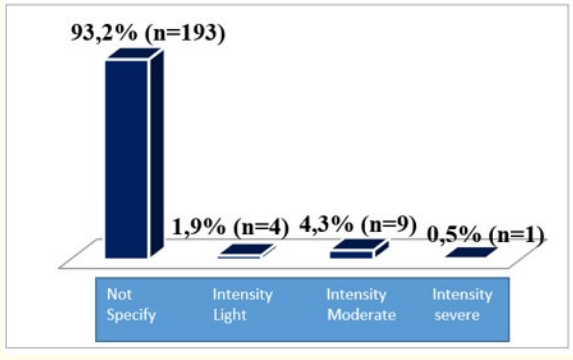

Figure 2: Distribution of patients by headache intensity (VAS). Headaches of moderate intensity were the most common with 4.3%.

Type of headache	Age (years)						Total
	≤20	21-30	31-40	41-50	51-60	>60	
Primary	27	19	27	20	10	7	110
Secondary	10	8	15	19	23	22	97
Total	37	27	42	39	33	29	207

Table 3: Distribution of headache type by age group.

Patients under 20 years of age and those with an age range between 31 and 40 years were the most affected by primary headache with 27 cases each.

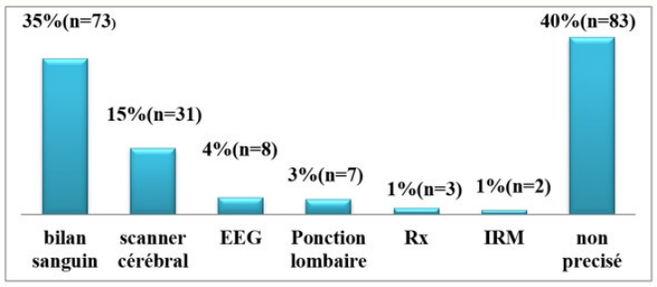

Figure 3: Distribution of patients according to paraclinical examinations.

Patients who had received blood tests accounted for 35%.

Iconography

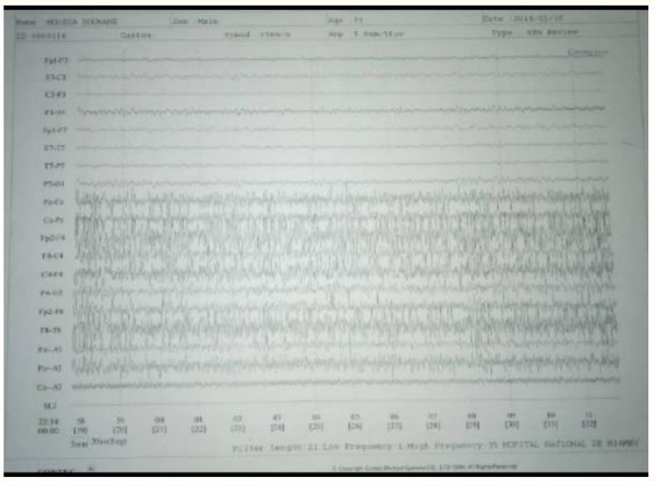

Figure 4: The electroencephalogram of a 77-year-old patient with frontal abnormalities diffusing to the other leads.

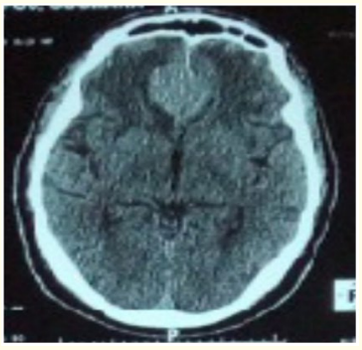

Figure 5: Axial section of a non-injected brain CT scan passing through the third ventricle): this is a patient of the same patient with a spontaneously hyperdense intracranial expansive process in frontal and para-sagittal associated with perilesional edema suggestive of a meningioma.

Source: Neurology Department of the National Hospital of Niamey.

Discussion

It is a retrospective study based exclusively on medical observations collected in specialized neurology and internal medicine consultations that allowed us to identify 207 cases of headaches.

We found missing data in some cases, such as outcomes regarding onset, timing, aggravating or triggering factors, headache manifestations, duration of seizures, and personal and family history.

In terms of socio-demographics, men represent 30.9% and women 69.1%, i.e. a sex ratio of 0.4 M/F. This result is lower than that of APPERT A. in Limoges (France in 2014) [1] who found a sex ratio of 0.59 M/F and that of BADDA A. in their study in Mali (2005) [10] with a sex ratio of 1.48.

On the other hand, our result is higher than that of AXEL L. in France (2016) [11] with a sex ratio of 0.3. The results found in the study are consistent with data observed in the literature, in particular in the WHO Headache Atlas published in 2011 [12], which show a predominance of women over men.

The age groups between 31 and 40 and between 41 and 50 were the most represented with 20.3% and 18.8% respectively and an average age of 41.

This result is lower than that of BADDA A. in Mali which shows a high rate (34.7%) for an age group between 30 and 35 years [10], and is consistent with the data observed in the Headache Atlas from WHO [12].

In this study, housewives were the most represented with a rate of 8.2%. This result is lower than that of BADDA A. in Mali who found 35.6% for housewives.

Clinically

Primary headaches were the most frequently diagnosed with a rate of 53.1 per cent, while secondary heads were 46.9 per cent.

This result is close to that of APPERT A. in France, which finds a rate of 55% for primary headaches. On the other hand, it is lower than that of AXEL L. in Limoge which shows a rate of 53% for primary headaches.

In the primary headaches the diagnosis of migraine was made in 34.8% of cases, the tension headache in 14.5% of cases and vascular algia of the face was represented in 3.4% of cases. This result is lower than that found by TAPHA O. which shows a predominance

of migraine with a rate of 82.4% in an external consultation study of neurology in Niamey in 2011 [13].

In a study in Mali, BADDA A. found a prevalence of 10.7% for migraine and 1.7% for tension headaches [10].

This result is different from that of AXEL L. in their study in France which shows a predominance of tension headaches compared to migraine with rates of 42% and 26% respectively [11].

Clinical aspects such as triumphal neuralgia and hypnotic headaches will not be studied because the data collected did not allow a thorough study.

Conclusion

Headache is a very frequent consultation pattern in our context, which at first remains very complex for the clinician. It can be a semiological entity of its own, then called primary headache, or be the sign of a underlying pathology that is potentially serious or even fatal, then it will be called secondary headache. The study conducted in this study revealed a female predominance. It affects all age groups with a high peak among subjects from 31 to 40 years of age. The majority of diagnoses were primary headaches with a predominant migraine. Secondary headaches were more represented by strokes. From a therapeutic point of view, medical treatment remains the first option. Paracetamol remains the most widely used analgesic for the management of seizures, followed by anti-inflammatory drugs such as indomethacin, then anti-epileptics and tricyclic antidepressants.

Bibliography

1. Appert AD. "Céphalées aiguës aux urgences du CHU de Limoges État des lieux et proposition d'un protocole pour la prise en charge". Thèse de doctorat en Médecine. Université de Limoges (paris) (2014): 107.

2. ADOUKONOU T A., *et al*. "Prévalence de la migraine dans une population de travailleurs à Cotonou au bénin". *African Journal of Neurological Sciences* 28.1 (2009): 16-23.

3. Headache Classification Committee of the International Headache Society. The International Classification of Headache Disorders. Cephalalgia 24 (2004): 1-160.

4. ANAES. Recommandations Prise en charge diagnostique et thérapeutique de la migraine chez l'adulte et chez l'enfant : aspects cliniques et économiques. Octobre (2002).

5. Expertise collective. La migraine : connaissances descriptives, traitements et prévention. Paris: INSERM. (1998).

6. Bassole Prisca-Rolande., *et al*. "LES CEPHALEES EN CONSULTATION EN MILIEU DE TRAVAIL A OUAGADOUGOU (BURKINA FASO): IMPACT SUR LA QUALITE DE VIE ET LE RENDEMENT PROFESSIONNEL DES PATIENTS". *African Journal of Neurological Sciences* 36.2 (2017).

7. Sonhaye L., *et al*. "Aspects tomodensitométriques des céphalées de l'adulte vues au Centre Hospitalier Universitaire du Campus de Lomé, Togo". *La Revue Médicale de Madagascar* 5.1 (2015): 497-500.

8. Wener J Becker., *et al*. "Lignes directrices sur la prise en charge en soins primaires des céphalées chez l'adulte". *Canadian Family Physician* 61.8 (2015): 353–364.

9. Henry P., *et al*. "La migraine en France. Etude épidémiologique, impact socio-économique et qualité de vie". Paris : John libbey Eurotext. (1993).

10. Badda AR. "Etude épidémiologique et clinique des céphalées dans le district de Bamako". Thèse de doctorat en médecine Université de Bamako (2005): 112.

11. Axel L. "Céphalées aiguës non traumatiques en médecine générale: recours aux urgences à propos de 100 cas recensés au SAU de Trinité". Thèse de doctorat en médecine Université Hyacinthe BASTARAUD des Antilles et de la Guyane (2016): 112.

12. Steiner TJ. "Atlas of headache disorders and resources in the world in 2011". OMS (2011).

13. Tapha O. "Nosologie et fréquence des affections neurologiques en consultation externe de neurologie à Niamey". Thèse de doctorat en médecine Université Abdou Moumouni de Niamey (2011): 199.