16 (2) 2025 : 001-003 • Case Report

# Migraine illness: A case report and review of the literature at Ndjamena national reference general hospital

Adoum Hamad Zenal Abidine\*

Department of Pathology, University of Doba, Doba, Chad

**AUTHORS' CONTRIBUTION: (A)** Study Design  $\cdot$  **(B)** Data Collection  $\cdot$  **(C)** Statistical Analysis  $\cdot$  **(D)** Data Interpretation  $\cdot$  **(E)** Manuscript Preparation  $\cdot$  **(F)** Literature Search  $\cdot$  **(G)** No Fund Collection

Aim: To study of a case and review of the literature in the Neurology Department of the National Referral General Hospital in N'Djamena.

**Objectives:** To continue improving the management of migraine headache in the Neurology Department of the National General Reference Hospital in N'Djamena. To achieve the objective, the following plan was adopted: Presentation of the clinical case.

**Results and Discussion:** Presentation of the clinical case of Mrs TS, 35 years old, a policeman by profession, was seen for: Diffuse headaches, vomiting and dizziness and progression over 4 days.

**Conclusion:** Although migrainous malaise is rare, it is a complication of migraine without aura that is difficult to manage, especially in countries with limited health resources

Keywords: Neurology; Migraine; Metastatic Neuroblastoma

## INTRODUCTION

Migraine is a chronic paroxysmal headache evolving through attacks between which the patient does not suffer (free interval). Its most frequent medical complication is migraine malaise. Migrainous malaise is defined as severe migraine attacks lasting more than 72 hours and resistant to the usual treatment of migraine attacks. It affects 10% of the population, with a clear predominance of women (2 out of 3 cases). Migraine is most often begins between the ages of 10 and 40 (90% of cases), sometimes in childhood and rarely after the age of 40. In the United States, the direct and indirect economic cost of this disease is estimated at between 5 and 17 billion dollars. Its prevalence in France and other European countries is estimated at between 12 and 15% of the population. In Africa (Nigeria and Zimbabwe), the prevalence of migraines is rare, at 7% and 12% respectively. In Chad, we found no studies on the subject. Thus, the scarcity of studies on this subject and the different diagnoses and management methods in the context of countries with limited health resources, motivated the choice of this theme entitled [1].

#### CASE PRESENTATION

TMrs TS, 35 years old, a policeman by profession, was seen for diffuse headaches, vomiting and dizziness. Progression over 4 days.

## **History of illness**

The onset of symptoms dates back to 4 days after the patient was admitted, marked by the progressive onset of intense unilateral, then bilateral headaches of the clenching type, accompanied by easy vomiting in spurts, requiring self-medication with paracetamol Cp 500 mg and Ibuprofen 400 mg, with no clinical improvement and given the onset of dizziness; the patient decided to consult our department for treatment, hence the reason for her hospitalization [2].

### **History**

Medical: Personal headache for 03 years.

Surgical: Appendectomy 10 years ago.

Family: Migraine in mother.

Collateral: Migraine in sister.

Lifestyle: Single; mother of one son; no alcohol or tobacco consumption; cereal and vegetable-based diet; no occupational stress.

## Physical examination

**Objective:** Patient conscious, cooperative, integument and conjunctiva normo colored, general condition preserved, BP 130/80 mmHg, pulse=68 pul/min, Spo<sub>2</sub>=98%, temperature=36.9°, fasting blood glucose=1.11g/l.

#### Address for correspondence:

Adoum Hamad Zenal Abidine, Department of Pathology, University of Doba, Doba, Chad; zenalabidineadoumhamad353@gmail.com

Word count: 1278 Tables: 00 Figures: 01 References: 00

Received: 14.05.2024, Manuscript No. IPJNN-24-14847; Editor assigned: 16.05.2024, PreQC No. IPJNN-24-14847 (PQ); Reviewed: 30.05.2024, QC No. IPJNN-24-14847; Revised: 01.05.2025, Manuscript No. IPJNN-24-14847 (R); Published: 29.05.2025

Neurological examination: Conscious patient segmental muscle tone preserved in all 4 limbs. Osteotendinous and cutaneoplantar reflexes normal. No sensory or coordination disorders (cerebellar; vestibular and proprioceptive) No signs of meningeal or cranial nerve damage. No cognitive function disorders or sphincter disorders.

On somatic examination: BDC were audible, regular and synchronous with the radial pulse, with no pathological noises added. Examination extended to other devices was also unremarkable. In total, this 35-year-old right-handed patient with no history of migraine had the following neurological findings:

Intracranial hypertension syndrome, migraine syndrome [3].

Diagnostic hypothesis: Migrainous malaise, infectious or noninfectious encephalitis, meningeal hemorrhage secondary to rupture of arteriovenous malformations, cerebral venous thrombosis.

#### **RESULTS**

Given the normality of the MRI angiogram, we performed a lumbar puncture at 3 days, which yielded macrospically a rock-clear fluid that was analyzed in the laboratory without any particularities (absence of germs and red blood cells, no proteinorrachia or glucorrachia below 0.4 g/l) (Figure 1).

**Fig. 1.** Metastatic neuroblastoma, x400, H and E.

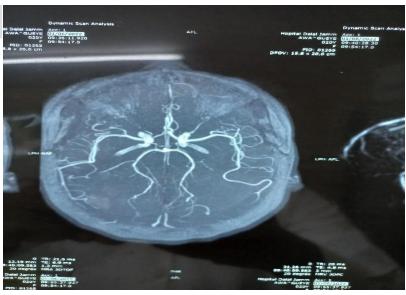


Fig. 1. Metastatic Neuroblastoma, x400, H&E

#### **Biology**

Hb: 1.12 g/l TPHA/VDRL negative; SRV: negative; Urea=90 mmol/l; Creat=120 mmol/l; VS=20 mm/1<sup>st</sup> hour; CRP=positive: Ge at 1ch/l

Ionogram: Na $^+$ =142 mmol/l; K $^+$ =3.6 mmol/l; Cl $^-$ =96 mmol/; Ca=92 mmol/l Mg $^{2+}$ =18mmol/l.

## **Treatment**

Saline 0.9% 500 ml 1fl × 2 for 3 days Perfalgan 1 g every 6h Primpéran inj 1 amp every 08 h Omeprazol 20 mg 1 cp/evening. Laroxyl 25 mg 1 cp/evening then 1 cp morning and evening.

**Progression:** At 3 days, the patient showed clinical improvement marked by regression of headache intensity. At 8 days, the patient was discharged after complete headache regression, with a discharge prescription based on ibuprofen 400 mg for attacks and Avlocardyl 40 mg 1cp in the evening for background treatment [4].

#### DISCUSSION

Migrainous malaise is a rare complication of migraine and is rarely reported in the literature. We report the case of a 35-year-old woman who consulted our department for refractory headaches lasting more than 72 hours and vomiting. In the literature, migraine is 3 times more frequent in women than in men. This predominance may be explained by the rapid and significant fall in estrogen and progesterone levels during menstruation, following luteolysis. This drop could be one of the causes of migraines in women. Several studies report that the age of 30 to 45 years is a risk factor; our patient is included in this age bracket. The reasons for

consultation correspond to the criteria dictated by the international headach society [5].

The history of the disease reports the progressive onset of intense unilateral headache, followed by bilateral headache within 2 hours, accompanied by easy vomiting in jet form, resistant to analgesics and anti-inflammatories. This clinical description of the signs is echoed in the study by Dumas et al. who reported the same setup procedures. Our patient reported a family history of migraine in her mother and sister. This family history was also found in the cases reported by D'Annequin and B Tourniaire. Although migraine is often hereditary, it is often under-reported, since 1/3 of patients presenting with migraine in adulthood are unaware that they have the disease. Our patient was a single mother of a liveborn son who did not drink or smoke. Neurological examination revealed no particularities. D Valade found no particularities on neurological examination. The absence of localization signs could be explained by the fact that the disease does not completely alter neuronal functions, even if auras sometimes manifest as transient ischemic attacks. Delayed diagnosis and management may favour the development of stroke. We carried out an angio-MRI scan, which proved normal [6].

Angio-MRI, lumbar puncture and blood tests enabled us to rule out: Infectious or non-infectious encephalitis arteriovenous malformation cerebral venous thrombosis. The diagnosis of migraine was made on the basis of epidemiological, clinical and therapeutic arguments. During hospitalization, she was treated with Laroxl 25 mg 2 CP/J peros; primperan 2 amp/d morning and evening and 1 l/d hydration. The evolution was marked by a complete regression of symptoms after 5 days of hospitalization

and the patient was discharged with a background treatment of tricyclic antidepressants, analgesics and benzodiazepines [7].

## **CONCLUSION**

Although migrainous malaise is rare, it is a complication of migraine without aura that is difficult to manage, especially in countries with limited health resources. The clinical picture is dominated by intense headaches lasting more than 72 hours

and resistant to anti-migraine treatment, associated with vomiting. Diagnosis is based on the criteria of the International Headeach Society. Management is in a specialized setting, with the introduction of sumatriptan-based hydration and a tricyclic antidepressant. A forthcoming study based on the evolution of seizures under treatment will clarify the short, medium and long term prognosis in our context.

- TEFERENCES
- Valade D. Migraine et urgences. J Eur Urgences Reanim. 2013; 25:82-88.
- Bousser MG, Massiou H. New international classification of headache disorders. *EMC Neurology*. 2004; 1:366-374.
- Wessman M, Kallela M, Kaunisto MA, et al. A susceptibility locus for migraine with aura, on chromosome 4q24. Am J Hum Genet. 2002; 70:652-662.
- Lashley KS. Patterns of cerebral integration indicated by the scotomas of migraine. Arch Neurol. 1941; 46:331-339.
- Rapoport A, Edmeads J. Migraine: The evolution of our knowledge. Arch Neurol. 2000; 57:1221-1223.
- Russell MB, Olesen J. A nosographic analysis of the migraine aura in a general population. *Brain*. 1996; 119:355-361.
- Olesen J, Steiner TJ. The International classification of headache disorders. J Neurol Neurosurg Psych. 2004; 75:808-811.