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State of Illness Migrainos: A Case and Review of the Literature at the National General Reference Hospital of Ndjamena

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Abstract

Introduction: Migraine is a chronic paroxysmal headache that progresses through attacks between which the patient does not suffer (free interval). We found no local or regional epidemiological data because migraine remains underdiagnosed. In Chad, we found no studies on this subject. **Body of the Text:** This is Mrs. TS, aged 35, her history goes back 4 days with unilateral headaches of moderate intensity, pulsating type and vomiting with self-medication of paracetamol Cp 500 mg 1 cp × 2 per day for 3 days and Ibuprofen 400 mg 1 cp/day for 4 days. The medical history of migraine attacks for 3 years. Physical and neurological examination were normal. A summary mentioned: Migraine syndrome and intracranial hypertension. The hypotheses had retained: Migraine status epilepticus, infectious encephalitis and meningeal hemorrhage. **Discussion:** Status migrainosus 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 for headaches lasting more than 72 hours, unilateral location, pulsatile type with moderate to severe intensity, aggravated by physical activities (walking) associated with nausea and vomiting, which correspond to the criteria dictated by the International Headache Society (IHS). The neurological and complementary examinations did not reveal any particularities. Dr. Valade had not found any particularities on the neurological examination. **Conclusion:** Although status migrainosus is rare, it is a complication of migraine without aura.

Keywords

State of Illness, Ndjamena, Reference Hospital

1. Introduction

Migraine is a chronic paroxysmal headache that progresses through attacks between which the patient does not suffer (free interval) [1].

Its most frequent medical complication remains status migrainosus [2].

Status migrainosus is defined by severe migraine attacks lasting more than 72 hours and resisting the usual treatment for migraine attacks [1]. It affects 10% of the population with a clear female predominance (2 out of 3 cases).

It most often begins between the ages of 10 and 40 (90% of cases), sometimes in childhood and rarely after the age of 40 [3].

In the United States, the direct and indirect economic cost of this pathology is estimated at between 5 and 17 billion dollars [1].

Its prevalence in France and in European countries is estimated at between 12 and 15% of the population [3].

In Africa (Nigeria and Zimbabwe) the prevalence of status epilepticus is rare and is reported to be 7 and 12% respectively [4].

We found no local or regional epidemiological data because migraine remains underdiagnosed.

In Chad we have not found any studies on this subject.

Thus the scarcity of studies on this subject; the different diagnoses and management in the context of countries with limited health resources motivated the choice of this theme entitled:

"STATUS MIGRAINOSIS: case study and literature review in the Neurology Department of the National General Reference Hospital of N'Djamena."

2. Body of the Text

This is Mrs. TS, aged 35, a professional gendarme, received for:

Moderate to severe headaches of unilateral pulsating type associated with digestive signs:

Nausea and projectile vomiting and dizziness

Evolution over the past 4 days

2.1. History of the Disease

The onset of the symptomatology would go back 4 days after its reception marked by the progressive occurrence of unilateral headaches of moderate intensity with a pulsating clamp type accompanied by easy projectile vomiting requiring self-medication made of paracetamol Cp 500mg 1cp × 2 per day for 3 days and Ibuprofen 400 mg 1cp/day for 4 days without clinical improvement and given the appearance of dizziness; the patient decided to consult in our department for treatment hence the purpose of her hospitalization.

Background:

Medical: migraine attacks for 3 years with the use of prophylactic medications

Surgical: appendectomy for 10 years

Family: Migraine in the mother

Collaterals: Migraine in the sister
Physical examination was normal
Neurological Examination:
Conscious patient
Muscle tone was normal
Segmental muscle strength rated 5/5 in all 4 limbs
The patellar, bicipital and triceps osteotendinous reflexes were normal.
Tactile-epicritic and deep sensitivity were preserved
Static and kinetic coordination was normal
The approach was unremarkable
No damage to the cochleo-vestibular, optic or facial nerves

2.2. On Aggregate

In this 35-year-old right-handed patient with a history of migraine; the neurological examination carried out to date has revealed:
Intracranial hypertension syndrome
Migraine syndrome

2.3. Diagnostic Hypothesis

Status migrainosus:
Infectious or non-infectious encephalitis
Meningeal hemorrhage secondary to rupture of arteriovenous malformations

2.4. Differential Diagnosis

We have dealt with headaches that can be similar: primary headaches, partial epilepsies and transient ischemic attacks.

2.5. Additional Tests Were Normal

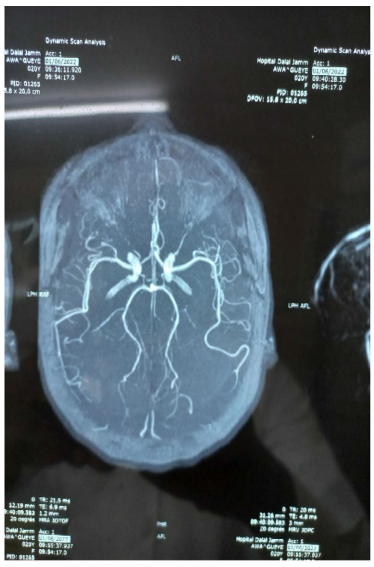

Figure 1. ANGIO MRI: normal.

Given the normality of the MRI angiography, we performed a lumbar puncture on day 3 of the disease, which macroscopically revealed a crystal clear liquid, which was analyzed in the laboratory without any particularity (absence of germs and red blood cells, no protein or glycorachia less than 0.4 g/l) (see **Figure 1**).

2.6. Biology

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

Ionogram: Na^+ = 142 mmol/l; k^+ = 3.6 mmol/l; CL^- = 96 mmol/; Ca = 92 mmol/l

Mg^{2+} = 18 mmol/l

2.7. Treatment

Salt serum 0.9% 500 ml 1 fl × 2 Pdt 3 days

Non-specific anti-migraine drugs:

Paracetamol (Perfalgan) 1 g every 6 hours

Antiemetic to combat vomiting:

Metoclopramide: Primperan injectable 1 amp every 8 hours

Background anti-migraine:

Antidepressants (Amitriptyline): Laroxyl 25 mg IV over 2 hours then 1 tablet morning and evening by discontinuing specific anti-migraine medications based on triptans (5HT selective serotonergic agonists) and hydroxyzine in our context.

Evolution: On day 3 of the evolution, a clinical improvement of the patient was noted, marked by the regression of the intensity of the headaches and on day 8 of the evolution the patient was released after a regression complete headache treatment with a discharge prescription based on ibuprofen 400 mg for attacks and Laroxyl 25 mg 1 tablet in the evening for background treatment

3. Discussion

Status migrainosus 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 a disabling migraine attack lasting more than 72 hours without remission caused by medication abuse associated with nausea and vomiting.

In the literature, migraine is 3 times more common in women than in men [5].

This predominance could be explained by the rapid and significant drop in estrogen and progesterone levels during menstruation following luteolysis [6]. This drop could be one of the causes of migraines in women.

Several studies report that age 30 to 45 years is a risk factor; our patient is included in this age group [5].

The reasons for our patient's consultation were headaches lasting more than 72 hours, unilateral in location, pulsating with moderate to severe intensity, aggravated by simple physical activities (walking) associated with nausea and vomiting without photophobia or phonophobia, which correspond to the criteria dictated by the International Headache Society (IHS).

The history of the disease reports the progressive onset of headaches lasting more than 72 hours, unilateral in location, pulsating type with moderate to severe intensity in 2 hours, accompanied by easy projectile vomiting resistant to analgesics and anti-inflammatories.

This clinical description of the signs is found in the study by Dumas *et al.*, who report the same installation procedures [2].

Our patient reported a family history of migraine in her mother and sister. These family histories are also found in the cases reported by Annequin D [7].

Although migraine is often hereditary, it is often underreported, since 1/3 of patients with migraine in adulthood are unaware that they have this disease.

Our patient is a single mother of a living son who does not drink alcohol or smoke tobacco.

The neurological examination did not reveal any particularities.

D Valade [4] had not found any particularities in the neurological examination.

The absence of localization signs could be explained by the fact that the disease does not completely alter neuronal functions even if the auras sometimes manifest as transient ischemic attacks.

Delays in diagnosis and treatment could contribute to the development of a stroke [4].

We performed the MRI angiography which turned out to be normal.

Angio-MRI; lumbar puncture and blood tests allowed us to eliminate:

Infectious or non-infectious encephalitis

An arteriovenous malformation

The diagnosis of status migrainosus was retained based on epidemiological, clinical and therapeutic arguments.

During the hospitalization she was subjected to tricyclic antidepressants (Amitriptyline): Laroxyl 25 mg IV over 2 hours then 2 tablets/day orally due to lack of triptans and Hydroxyzine in our country associated with antiemetics based on Metoclopramide Primperan 2 amps/day morning and evening and hydration based on 1 l/day.

The evolution was marked by the complete regression of symptoms after 5 days of hospitalization and the patient was released with basic treatment consisting of tricyclic antidepressants, analgesics and benzodiazepines.

4. Conclusions

Although status migrainosus is rare, it constitutes a complication of migraine without aura, the management of which is difficult, especially in countries with limited health resources [7].

The clinical picture of our patient is dominated by intense headaches lasting more than 72 hours, unilateral in location, pulsatile type with moderate to severe intensity associated with vomiting and resistant to non-specific anti-migraine treatment.

The diagnosis is based on the criteria of the International Headquarters Society

(IHS).

Management of a patient who has received an NSAID is carried out in a specialized environment with the introduction of rehydration associated with triptan 25 mg IV over 2 hours and Metoclopramide ± Hydroxyzine in the event of failure of treatment based on a tricyclic antidepressant Amitriptyline, Dexamethasone 10 to 20 mg slow IV or chlorpromazine 0.1 mg/kg slow IV [4].

A future study based on the evolution of seizures under treatment will clarify the short, medium and long-term prognosis in our context.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

[1] Grellet, J. and Aux, M.C. (2005) Treatment of Migraine. *Revue Neurologique*, **161**, 687-688.

[2] Valade, D. (2013) Migraine et urgences. *Journal Européen des Urgences et de Réanimation*, **25**, 82-88. https://doi.org/10.1016/j.jeurea.2013.04.007

[3] Bousser, M. and Massiou, H. (2004) Nouvelle classification internationale des céphalées. *EMC—Neurologie*, **1**, 366-374. https://doi.org/10.1016/j.emcn.2004.06.004

[4] Massiou, H. (2010) Traitement de la migraine: Présent et avenir. *La Revue de Médecine Interne*, **31**, 399-402. https://doi.org/10.1016/j.revmed.2009.12.009

[5] Macaluso, G.M., Bonanini, M., Bizzi, P., Vescovi, P., Pizzi, S., Manzoni, G.C. and Gennari, P.U. (1990) Headaches and Craniofacial Pains with Dental Involvement in the Classification of the International Headache Society (1988). *Minerva Stomatologica*, **39**, 685-695.

[6] Manaka, S. (2005) An Overview of the Revised International Classification of Headache Disorders (ICHD-II). *Nihon Rinsho*, **63**, 1693-1698.

[7] Annequin, D. (2006) La migraine de l'enfant. *Archives de Pédiatrie*, **13**, 811-814. https://doi.org/10.1016/j.arcped.2006.03.080