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Original Research Article

Epileptic Status Epilepticus in the Intensive Care Unit of the Dalal Jamm National Hospital: Socio-Demographic, Clinical, Therapeutic, and Outcome Aspects

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Abstract: EME is classically defined as a "fixed and lasting epileptic condition" and, more precisely, as continuous seizures or a succession of seizures without improvement in consciousness over a period of 30 minutes. The aim of this study was to assess the status epilepticus in the intensive care unit of CHNDJ. This was a single-center, observational, retrospective, descriptive, and analytical study. We included all patients hospitalized in the intensive care unit of the CHNDJ between January 1, 2022, and December 31, 2024, who presented with status epilepticus. Clinical and paraclinical data were collected. The prevalence was 3.37%. The mean age was 34.57 years. The sex ratio was 0.78. 33% were being treated for epilepsy, and 21 patients (66%) came from the emergency department. Refractory status epilepticus was found in 49% of patients, and 15% had super-refractory status epilepticus. Hemodynamic instability was the most frequent abnormality on admission, present in 28.125% of patients. EEG was performed in 3 patients (9.37%), and a brain CT scan was performed in all patients. Anemia, hypocalcemia, and hypokalemia were the most common laboratory abnormalities, present in 34% of patients. Lumbar puncture was performed in 16 patients (50%). Hypoproteinorachia and hypoglycorachia were predominant, each occurring in 22% of cases. The cerebrospinal fluid (CSF) was clear in 34% of patients. Discontinuation of treatment was the most frequent cause (31.25%), followed by ischemic stroke (18.75%). Anticonvulsant therapy was initiated in all patients to prevent seizures. The mean duration of sedation was 8.21 ± 8.12 days, ranging from 1 to 35 days. The combination of midazolam and fentanyl was the most commonly used sedative. 72% of patients developed a nosocomial infection during their hospitalization. Ventilator-associated pneumonia (VAP) was the most frequent nosocomial infection, occurring in 22% of cases. Hyperthermia was the most common adverse event occurring in the acute phase of the illness (72%), followed by hypoglycemia in 65%. The mortality rate was 62.5%. The average length of hospital stay was 11.37 ± 8.61 days. There was a significant association between the presence of a nosocomial infection and the occurrence of death. The presence of a nosocomial infection increased the risk of death by a factor of 12 compared to uninfected patients. Hypotension was significantly correlated with the occurrence of death. There was a significant association between hyperthermia and the occurrence of death. EME is a life-threatening emergency and is associated with significant mortality and morbidity. Early recognition of the condition and the rapid initiation of appropriate treatment are essential.

Keywords: Status epilepticus, Resuscitation, Dalal Jamm.

INTRODUCTION

Status epilepticus, the existence of which has been documented since Calmeil 's work in 1824 [1], represents a pathological condition characterized by great diversity in its clinical manifestations, ages of onset, causes, and prognoses. Status epilepticus is an electro-clinical syndrome defined by the rapid recurrence of epileptic seizures, with persistence, during the

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interictal phase, of altered consciousness and/or neurological signs reflecting neuronal exhaustion of the cortical areas involved in epileptic discharges [2].

The origin of epilepsy results from an imbalance between inhibitory and excitatory neuronal networks. EME, on the other hand, results from a combination of persistent cellular excitation and the loss of central mechanisms designed to suppress epileptic activity. [12].

It is estimated that their annual frequency is 60,000 to 250,000 cases in the United States [3], 25,000 to 30,000 cases in France [4], and 9,000 to 140,000 cases in the United Kingdom [5-6], half of which manifest as seizures. Approximately 5% of people with epilepsy will experience at least one episode of severe acute epilepsy (SAE) during the course of their illness. This proportion is higher in children, ranging from 10% to 25% [7-8]. This incidence is greater in children and adults over 60 years of age [3]. The 30-day mortality rate following SAE varies from 7.6% to 39% [9-10-11-12]. Neurological sequelae can appear in cases of ECMO after 60 to 90 minutes without treatment [3]. Several factors influence the prognosis, primarily age, the duration of seizures, and neurological complications [13]. The incidence of convulsive EME (EME) varies from 10 to 20 per 100,000, and is twice as high in developing countries as in industrialized countries, ranging from 19.3 to 57.1% [14-15].

It is clear that status epilepticus represents a common medical emergency, even though its exact frequency and prevalence remain poorly defined. Refractory status epilepticus (RSE) is defined in all studies as RSE resistant to at least two different antiepileptic drugs (AEDs) administered at the appropriate dosage [3-16-17]. Finally, super-refractory RSE is defined as the persistence or recurrence of epileptic activity after 24 hours of general anesthesia for RSE [18].

Epidemiological data on this condition in our intensive care units in sub-Saharan Africa are relatively scarce. It is in this context that we decided to study the management of status epilepticus in intensive care. Thus, the main objective of our study was to assess the current state of status epilepticus in intensive care.

This work retrospectively studies 32 patient files treated for status epilepticus in the multipurpose intensive care unit of the Dalal Jamm National Hospital Center (CHNDJ), over a 3-year period from January 2022 to December 2024.

MATERIALS AND METHODS

A single-center, observational, retrospective, descriptive, and analytical study was conducted in the multipurpose intensive care unit of the Dalal Jamm National Hospital Center over a three-year period, from January 1, 2022, to December 31, 2024. All patients hospitalized in the multipurpose intensive care unit of the Dalal Jamm National Hospital Center (CHNDJ) between January 1, 2022, and December 31, 2024, for status epilepticus were included in this study. Epidemiological, clinical, paraclinical, therapeutic, and outcome data were collected retrospectively from medical records using a data collection form. Data entry was performed using Excel 2019. The data were analyzed using Epi Info 7.2.6.0, and the graphs were formatted using Microsoft Excel 2016. Fisher's exact test was used to compare proportions, and Student's t-test to compare means. Anonymity was ensured during data collection, in accordance with medical ethics guidelines.

RESULTS

During the study, 855 patients were hospitalized in the multi-purpose intensive care unit. Among the hospitalized patients, 32 had status epilepticus, representing a frequency of 3.37%. The mean age of the patients was 34.57 ± 23.18 years (range 3 months to 73 years), with a male-to-female ratio of 0.78. 34.37% of patients were being treated for epilepsy, and 66% of patients came from the emergency department. Refractory status epilepticus was found in 49% of patients, and 15% had super-refractory status epilepticus. All patients presented with altered consciousness. 84% of them were admitted without sedation, including 68.75% with a Glasgow Coma Scale (GCS) score of ≤ 100%. 8. Hemodynamic instability was the most frequent abnormality on admission, present in 28.12% of patients, followed by respiratory distress found in 12.50%. Clinical signs are summarized in Table I.

EEG was performed in 9.37% of patients, after monitoring vital functions; these were the initial EMEs posing diagnostic challenges. The average time to completion was 6.33 days. A brain CT scan was performed on all patients. It was normal in 56% of cases, with a mean time to completion of 1.06 hours. Anemia, hypocalcemia, and hypokalemia were the most frequently observed biological abnormalities, present in 34.37% of patients. Lumbar puncture was performed in 16 patients (50%). The fluid was clear in 34.37% of cases, and the biochemistry showed predominantly low protein (22%) and low glucose (22%) cerebrospinal fluid. Table II shows the distribution of CT and laboratory results. Discontinuation of treatment was the most common etiology (31.25%), followed by ischemic stroke (18.75%). Table III shows the distribution of the different etiologies.

All patients received first-, second-, and third-line treatment. Benzodiazepines (100%) were used in first-line treatment. Phenobarbital (100%), levetiracetam (28.12%), clonazepam (9.37%), carbamazepine (34.37%), and sodium valproate (78.12%) were used in second-line treatment. Midazolam, diazepam, thiopental, and fentanyl were used for sedation in third-line treatment. The mean duration of sedation was 8.21 ± 8.12

days, and the combination of midazolam and fentanyl was the most frequently used sedative, followed by thiopental and fentanyl. Hyperthermia was the most common adverse event following anaesthesia (72%), followed by hypoglycemia (65%) and hyperglycemia (59%). Table IV shows the distribution of healthcare-associated infections (HAIs). Seventy-two percent (72%) of patients had a hospital-acquired infection, and ventilator-associated pneumonia (VAP) was the most frequent (22%). The average length of stay in the intensive care unit in our series was 11.37 ± 8.61 days, and the outcome was favorable in 37.5% of cases.

Bivariate analysis showed no significant association between sex, age, duration of sedation, history of epilepsy, mean time to treatment, and mortality. A significant association was found between nosocomial infection (78.26%) and death, as well as between refractory status epilepticus and death. The presence of a nosocomial infection and hyperthermia increased the risk of death by a factor of 12 compared to uninfected patients. Table V shows the Lethality as a function of age, sex, nosocomial infection, history of epilepsy, refractory status epilepticus, duration of sedation and time to treatment. The proportion of deceased patients who presented with hypotension (84.62%) and hyperthermia was significantly higher than the proportion of deceased patients who did not present with these conditions, with a p-value < 0.001. Hypotension was associated with a sixfold increased risk of death compared to patients without hypotension [OR=6.11 ($_{95\%\ CI}$ [1.05-35.35])]. Table VI illustrates the case fatality rate of ACSOS.

Table I: Distribution according to clinical signs

Clinical signs	Number of employees (n)	Percentage (%)
Hemodynamic instability	9	28.12
Respiratory distress	4	12.50
Fever (temperature >38°C)	4	12.50
Motor deficit	4	12.50
Hypoglycemia	2	6.25
Hyperglycemia	1	3.12
Bilateral mydriasis	1	3.12

Table II: Distribution of CT scan and biology results

Scan results	Number of employees (n)	Percentage %
Normal	18	56
AVCI	6	19
Meningoencephalitis	3	9
AVCH	2	6
Meningioma	1	3
Subdural hematoma	1	3
Hydrocephalus	1	3
Biological anomaly	**Number of employees (n)**	**Percentage %**
Anemia	11	34.47
Hyponatremia	9	28.12
Hypernatremia	3	9.37
Hypokalemia	11	34.47
Hyperkalemia	2	6.25
Hypocalcemia	11	34.37
Hypercalcemia	2	6.25
Kidney failure	9	28.12
Cytolysis	3	9.37
positive CRP	25	78.12
PCT positive	11	34.37
Thick positive drop	1	3.12
Appearance of the CSF	**Number of employees (n)**	**Percentage %**
Clear LCR	11	34.37
Purulent CSF	1	3.12
LCR turbid	2	6.25
Clear CSF	1	3.12
CSF hematoma	1	3.12
CSF abnormality	**Number of employees (n)**	**Percentage %**
Hyperproteinorchia	2	6.25

Scan results	Number of employees (n)	Percentage %
Hypoproteinorachia	7	22
Hypoglycorrhachia	7	22
Hyperglycorrhachia	1	3.12
Hypercellularity	1	3.12
Total	**32**	**100**

Table III: Distribution according to etiologies

Etiologies	Number of employees (n)	Percentage %
Therapeutic disruption	10	31.25
AVCI	6	18.75
Meningoencephalitis	5	15.62
Unknown	4	12.50
TCE	2	6.25
AVCH	2	6.25
Meningioma	1	3.12
Severe malaria	1	3.12
Total	32	100

IVC: Ischemic Stroke
HVA: Hemorrhagic stroke
TCE: Traumatic Brain Injury
HTA: Hypertension
MRC: Chronic Kidney Disease

Table IV: Distribution of patients according to ACSOS

ACSOS	Staff	Percentage %
Hypertension	16	50
Hypotension	13	40
Hypoxemia	13	40
Hypocapnia	3	9
Hypercapnia	13	40
Hypothermia	8	25
Hyperthermia	23	72
Hyponatremia	11	43
Hypernatremia	7	22
Hypoglycemia	21	65
Hyperglycemia	19	59

ACSOS: Secondary brain injuries of systemic origin

Table V: Case fatality rate according to age, sex, nosocomial infection, history of epilepsy, refractory status epilepticus, duration of sedation, and time to treatment

Variable	Modality	Death		P value	Gros Odds Ratio	95% confidence interval
		Yes (%)	No			
Sex	**Male**	12 (80.00)	3	0.05	-	-
	Female	8 (47.06)	9		-	-
Nosocomial infection	Yes	18 (78.26)	5	0.005	12.6	[1.96-80.75]
	No	2 (22,22)	7		Ref.	-
History of epilepsy	Yes	5 (45,45)	6	0.14	-	-
	No	15 (71.43)	6		-	-
Refractory status epilepticus	Yes	12 (100)	0	<0.001	-	-
	No	8 (40)	12		-	-

Variable	Terms and conditions	Average	P-value
Age and Death	Death (Yes)	36.66 years	0.51
	Death (no)	31.08 years	
Processing time	Death (Yes)	3.20 hours	0.26
	Death (no)	1.41 hours	0.26
Duration of sedation	Death (Yes)	9.95 hours	0.18
	Death (no)	**5.33 hours**	

Table VI: Case fatality rate according to ACSOS

Variable	Modality	Death		P value	Gross Odds Ratio	95% confidence interval
		Yes (%)	No			
Hypernatremia	Yes	4 (57.14)	3	0.53	-	-
	No	16 (64.00)	9		-	-
Hyponatremia	Yes	8 (72,73)	3	0.31	-	-
	No	12 (57,14)	9		-	-
Hyperglycemia	Yes	12 (63.16)	7	0.60	-	-
	No	8 (61.54)	5		-	-
Hypoglycemia	Yes	14 (66,67)	7	0.38	-	-
	No	6 (54, 55)	5		-	-
Hypertension	Yes	10 (62.5)	6	0.50	-	-
	No	10 (62.5)	6		-	-
Hypotension	Yes	11 (84.62)	2	0.03	6.11	1.05-35.35
	No	9 (47,37)	10		Ref.	-
Hyperthermia	Yes	18 (78.26)	5	0.005	12.6	[1.96-80.75]
	No	2 (22,22)	7		Ref.	-
Hypothermia	Yes	8 (88,89)	1	0.06	-	-
	No	12 (52,17)	11		-	-
Hypercapnia	Yes	10 (71.43)	4	0.29	-	-
	No	10 (55.56)	8		-	-
Hypocapnia	Yes	3 (100)	0	0.22	-	-
	No	17 (58,62)	12		-	-
Hypoxemia	Yes	10 (76.92)	3	0.15	-	-
	No	10 (52,63)	9		-	-

DISCUSSION

In older epidemiological studies, a variation in the incidence of status epilepticus (SE) was observed depending on the type of hospital setting. Indeed, it increases with the specialization of the facility, ranging from 0.013% of admissions in general hospitals [19] to 0.13% in university hospitals [20] and up to 3.5 % in intensive care units [21]. Our study included a heterogeneous cohort of young and adult patients presenting with status epilepticus. The hospital prevalence in our study was 3.37%. The mean age in our study was 34.57 years, with a high frequency in those under 15 years of age, representing 28% of cases. Our results are similar to those of Hicham [22], with a mean age of 36.38 years, and those of Doumbia-Ouattara M. *et al*. [23] with a mean age of 37.1 years in his 2013 study. EME is more frequent in children and the elderly, as their brains are either more vulnerable or, in the elderly, weakened by structural or metabolic damage. This variation could be due to methodological differences as well as the epidemiological transition in Africa, characterized by an increase in cardiovascular diseases among the elderly. A predominance of males was observed in most of the studies analyzed. The number of women in our study was 18 (56%) and 14 (44%) for men. The sex ratio was 0.78. The results obtained in our study are consistent with those of BOUH KJ [24] and Vignatelli in a study conducted in Bologna [12].

Electroencephalography (EEG) measures the electrical activity produced by the cortex and allows for the identification of epileptic abnormalities. EEG also plays a crucial role in assessing the prognosis of status epilepticus [25- 26]. EEG was performed in 9.37% of cases, and in 66.67% of these cases, it revealed abnormalities consistent with generalized status epilepticus. This small proportion can be explained by accessibility issues. EEG was not performed daily, and sometimes the patient lacked the financial means.

It is essential to identify and treat the underlying etiology [7]. Rapid etiological investigation is crucial, without delaying the initiation of antiepileptic treatment or resuscitation measures during status epilepticus (SE). Indeed, SE can often result from multiple etiologies. If an underlying cause is not identified and treated, it can contribute to maintaining SE [27]. In cases of initial SE, the main causes are stroke (in the acute or sequelae phase), metabolic disorders, followed by tumors and infections. After age 60, the main cause is stroke in its acute phase (ischemic, hemorrhagic, subarachnoid hemorrhage, cerebral thrombophlebitis). In patients with epilepsy, the leading cause of seizures is underdosing of antiepileptic drugs (AEDs) (non-adherence, treatment changes, drug interactions, etc.), followed by alcohol intoxication or withdrawal, the prescription of proconvulsant drugs, and intercurrent infections. In the absence of an obvious triggering factor or in the event of a change in seizure type, the diagnostic approach should be the same as for initial seizures [28].

All patients were intubated and placed on mechanical ventilation based on neurological criteria, and in 13% of cases, these were associated with respiratory criteria. The average duration of intubation was 9.25 days, with a range from 1 to 35 days, significantly longer than that of Bouh KJ [24], in whose study only 80% of patients were intubated and placed on mechanical ventilation. In contrast, in Cissé's study [29] conducted in Guinea, no patients were placed on mechanical ventilation. This large difference is explained by the fact that Cissé's study [29] was not conducted in an intensive care unit, likely due to a lack of ventilators. Benzodiazepines (100%), particularly midazolam (53%) and diazepam (47%), were used as first-line treatment. In contrast, Cissé used benzodiazepines in only 66.67% of cases, supplementing them with phenobarbital. The 2020 SFAR (French Society of Anesthesia and Intensive Care) guidelines recommend using a benzodiazepine as first-line treatment [30]. Phenobarbital, levetiracetam, clonazepam, carbamazepine, and sodium valproate were used for second-line treatment in our study. American guidelines list valproate, phenytoin, and levetiracetam as second-line treatments without specifying a hierarchy. [16] The 2018 French guidelines recommended valproate, phenytoin, and phenobarbital at equivalent levels, with a slight reservation regarding levetiracetam, "given its lesser evaluation [31]." Third-line treatment is for refractory status epilepticus (RSE). Refractory epileptic seizures (ESS) are defined as ESS that do not respond to two antiepileptic drugs administered at appropriate dosages [16-32]. Approximately 20% of ESS cases progress to acute epileptic seizures (AES) and 13% to latent ESS [33- 34]. In our study, the progression to refractory ESS was more frequent, at 49%. All our patients were sedated, and the mean duration of sedation was 8.21 ± 8.12 days, with a range from 1 to 35 days. Midazolam, diazepam, and thiopental were used for sedation. The combination of midazolam and fentanyl was the most frequently used treatment (53%), followed by thiopental and fentanyl (34%). Midazolam was prioritized in our work because, unlike propofol or thiopental, midazolam is not an anesthetic induction drug, but its good hemodynamic tolerance makes it quite suitable for anesthetic maintenance [35].

In our study, hyperthermia was the most frequently observed adverse event following anaesthesia (AEFA), with a frequency of 72%, followed by hypoglycemia (65%) and hyperglycemia (59%). It is well established that hyperthermia exacerbates neuronal damage secondary to ME/CFS and promotes the process of epileptogenesis by inducing a proconvulsive state [36]. It also increases intracranial hypertension (ICH) through CO2 overproduction. The proportion of deceased patients with hyperthermia (78.26%) was significantly different from the proportion of deceased patients without hyperthermia (22.22%), with a p-value of 0.005. There is a significant link between the presence of hyperthermia and the occurrence of death. The presence of hyperthermia increased the risk of death twelvefold. Hypotension was present in 40% of patients. The proportion of deceased patients who had hypotension (84.62%) was significantly higher than the proportion of deceased patients who did not have hypotension (47.37%), with a p-value of 0.03. Therefore, there is a significant link between hypotension and the occurrence of death. Hypotension increases the risk of death sixfold compared to patients without it. In patients with neurological injuries, the benefit of maintaining sufficient blood pressure has already been demonstrated through retrospective and experimental studies: A retrospective study by Chesnut *et al*. on 717 patients from the Traumatic Coma Data Bank [37] observed that hypotension was independently associated with mortality and morbidity in patients with severe traumatic brain injury (TBI) (Glasgow Coma Scale ≥ 8). A significant drop in blood pressure in patients who had lost their cerebral autoregulation resulted in a significant and rapid decrease in cerebral blood flow (CBF). After an average length of stay in intensive care of 11.37 ± 8.61 days, with extremes ranging from 2 to 37 days, the overall mortality rate was 62%. This is slightly higher than that found by Cissé, who reported an average length of hospital stay of 11.12 days and a mortality rate of 43.33%. In the literature, this rate varies from 7% to 57.1% and is much higher in developing countries [16].

The main limitation of our study lies in the sample size. The number of patients included is relatively small, which limits statistical power and may explain why many associations were not significant. We conducted a single-center study, which limits the generalizability of the results to other hospitals or regions. The absence of multivariate logistic regression limits the ability to identify independent risk factors for death. Certain variables were not collected (Intracranial Pressure, Transcranial Doppler), which reduces the interpretability of the results.

CONCLUSION

Adult seizures are a medical emergency requiring prehospital management. The causes are diverse. The treatment protocol should be based on the recommendations of learned societies and adapted to the specific resources of each country and even each intensive care unit. The judicious and prompt use of antiepileptic drugs and, if necessary, anesthetic agents, combined with resuscitation measures, makes it possible to control even the most severe forms and likely reduce the frequency of refractory seizures. Advances in resuscitation and the availability of antiepileptic drugs have improved the prognosis of seizures. Vital and functional outcomes could be further improved through better prevention and effective treatment of infectious diseases, a reduction in the time to treatment, and improved resuscitation resources.

REFERENCES

1. Delgado-Escueta A, Wasterlain C, Treiman D, Porter R Advances in Neurology, status epilepticus, Mechanism of brain damage and treatment. Vol.34, 24, pp.XXV -XXVII, Raven Press, New York, 1983.
2. Agus Z, Wassertein A, Goldfarb S Disorders of calcium and magnesium homeostasis. Am. J. Med., 1982, 72,473-488.
3. Outin H, Blanc T, Vinatier I. Emergency and intensive care management of status epilepticus in adults and children (excluding newborns). Formalized expert recommendations under the auspices of the French -Language Intensive Care Society. Intensive Care 2009;18: 4–12.
4. Shorvon S. Status epilepticus. Its clinical features and treatment in children and adults. Cambridge: Cambridge University Press; 1994.
5. Prasad K, Al- Roomi K, Krishnan PR, Sequeira R. Anticonvulsant therapy for status epilepticus. Cochrane Database Syst Rev 2005: CD003723.
6. Van Rijckevorsel K, Boon P, Hauman H, Legros B, Ossemanns M, Sadzot B, *et al*. Standards of care for adults with convulsive status epilepticus: Belgian consensus recommendations. Acta Neurol Belgian 2005;105: 111-8.
7. Aminoff M, Simon R Status Epilepticus. Cause, clinical features and consequences in 98 patients with transient loss of consciousness. Am. J. Med., 1980, 69,657-666.
8. Androli T, Carpentier C, Plum F, Smith L Epilepsy In: Cecil, Essentials of medicine. W. B. Sauders: Philadelphia, 1986,760-770.
9. DeLorenzo RJ, Hauser WA, Towne AR, Boggs JG, Pellock JM, Penberthy L, *et al*. A prospective, populationSbased epidemiological study of status epilepticus in Richmond, Virginia. Neurology 1996; 46: 1029S35.
10. Coeytaux A, Jallon P, Galobardes B, Morabia A. Incidence of status epilepticus in French-speaking Switzerland: (EPISTAR). Neurology 2000; 55: 693S7.
11. Knake S, Rosenow F, Vescovi M, Gertel WH, Mueller HH, Wirbatz A, *et al*. Incidence of status epilepticus in adults in Germany: a prospective, population-based Epilepsy study 2001; 42: 714S8.
12. Vignatelli L, Tonon C, D'Alessandro R. Incidence and short-term prognosis of status epilepticus in adults in Bologna, Italy [on behalf of the Bologna group for study of status epilepticus]. Epilepsia 2003; 44: 964S8.
13. Legriel S, Azoulay E, RescheSRigon M, Lemiale V, Mourvillier B, Kouatchet A, *et al*. Functional outcome after convulsive status epilepticus. Crit Care Med 2010;
14. DOUMBIA-OUATTARA M, AKA-DIARRA E, KOUME-ASSOUAN A, KOUASSI L, DIAKATE I, SONAN-DOUAYOUA T. Status epilepticus (SE) in the neurology department of the Yopougon University Hospital Center in Côte d'Ivoire. North African and Middle East Epilepsy Journal 2013; 2 (6): 17-19
15. OUTIN H, BLANC T, VINATIER I, and the expert group. Emergency and intensive care management of status epilepticus in adults and children (excluding newborns). Formalized expert recommendations under the auspices of the French-Language Intensive Care Society. Réanimation 2009;18: 4-12
16. Glauser T, Shinnar S, Gloss D, *et al*. Evidence-based guidelines: treatment of convulsive status epilepticus in children and adults: reports of the guideline committee of the American Epilepsy Society. Epilepsy Curr 2016; 16:48-61.
17. Meierkord H, Boon P, Engelsen B, *et al*; European Federation of Neurological Societies. EFNS guideline on the management of status epilepticus in adults. Eur J Neurol 2010; 17:348-55.
18. Shorvon S, Ferlisi M. The treatment of super-refractory status epilepticus: has critical review of available therapies and a clinical treatment protocol. Brain. Oct 1 2011; 134(10): 2802 -18.
19. Gaspard N, Foreman BP, Alvarez V, Cabrera Kang C, Probasco JC, Jongeling AC, *et al*. Critical Care EEG Monitoring Research Consor tium (CCEMRC). New- onset refractory status epilepticus: etiology, clinical features, and outcome. Neurology 2015;85: 1604–13.
20. Chapman MG, Smith M, Hirsch NP. Status epilepticus. Anaesthesia 2001; 56:648-59.
21. Treatment of convulsive status epilepticus. Recommendations of the epilepsy Foundation of America's working group on status epilepticus. JAMA 1993; 270: 854—9
22. Pisani F, Cerminara C, Fusco C, *et al*. Neonatal status epilepticus vs recurrent neonatal sei zures. Clinical findings and outcome. Neurol ogy 2007;69: 2177–85.
23. Betjemann JP, Lowenstein DH. Status Epilepticus in Adults. Lancet Neurol 2015;14: 615-24.
24. Raspall-Chaure M, Chin RF, Neville BG, Scott RC. Outcome of pediatric convulsive status epilepticus: has systematic review. Lancet Neuro rol 2006;5: 769–79.
25. Kabore J, Lengani A, Drabo YJ. Clinical aspects of seizure disorders at Ouagadougou Burkina Faso Retrospective study of 532 cases. AJNS, 1995; 14: 1-4.
26. Zakaria S. Status Epilepticus in Intensive Care: Etiological Profile and Prognosis. [Thesis]. Sidi Mouhamed Ben Abdallah University of Fez
27. Doumbia OM, Boa YF, Kouassi KL, Kouame AAE, Aka ADE, Sonan DT. Evaluation of the treatment of adult epileptics hospitalized in the neurology department of the Yopougon University Hospital in Abidjan - Côte d'Ivoire. AJNS, 2010; 29 (1): 34-7.
28. Santoli F, Crespel A. Etiological investigation during status epilepticus. Rev Neurol 2009;165: 315–9.

29. Lai A, Outin HD, Jabot J, et al. Functional outcome of prolonged refractory status ear lepticus. Crit Care 2015;19: 199. http://dx.doi. org /10.1186/s13054-015-0914-9.
30. Treiman DM, Meyers PD, Walton NY, Collins JF, Colling C, Rowan AJ, *et al*. A comparison of four treatments for generalized convulsive status epilepticus. N Engl J Med 1998;339: 792—8.
31. Outin H, Gueye P, Alvarez V, Auvin S, Clair B, Convers P, *et al*. Management of status epilepticus. Formal recommendations expert panels. Med Intensive Reanim 2018 [In press].
32. Dupont S, Crespel A. Status epilepticus: epidemiology, definitions and classifications. Réanimation 2009;18: 13-20
33. Goodkin HP, Yeh JL, Kapur J. Status Epilepticus Increases the Intracellular Accumulation of GABAA Receptors. J Neurosci 2005;25: 5511-20.
34. Patel NC, Landan IR, Levin J, Szaflarski J, Wilner AN. The use of levetiracetam in refractory status epilepticus. Seizure 2006;15: 137–41.
35. Outin H, Liot P, De Jonghe B, Thomas P. Management of refractory convulsive status epilepticus in intensive care. Rev Neurol 2002; 158(11): 1059-68.
36. Niermeijer JM, Uiterwaal CS, Van Donselaar CA. Propofol in status epilepticus: little evidence, many Dangers? J Neurol 2003;250: 1237–40.
37. Novy J, Logroscino G, Rossetti AO. Refractory status epilepticus: a prospective observational Epilepsy study 2010;51: 251–6.

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