
**Stroke in Emergency Care Unit of Sylvanus Olympio Teaching Hospital
Center of Lome**

Toyti T CHAMDJA^{1,5}, & , Kodjo Agbeko DJAGADOU^{2,4}, Abago B ALAKA^{2,4}, Hamadi ASSANE^{3,4}, Mohaman Awalou DJIBRIL^{2,4}

¹Department of Internal Medicine, Sylvanus University Hospital Olympio de Lomé

²Ministry of Health and Social Protection, Togo

³Faculty Department of General Medicine, Kara University Hospital , Togo

⁴Faculty of Health Sciences, University of Lome, Togo

⁵Faculty of Health Sciences, University of Kara, Togo

Abstract

Goal : I identify the epidemiological, diagnostic and progressive aspects of Ischemic stroke in medical resuscitation.

Material and methods: It had been a retrospective study of patient records from 1 January 2011 to 31 December 2012 in the medical intensive care unit for ischemic stroke.

Results: A total of 73 patients had an ischemic stroke . The hospital frequency was therefore 3.62 % . Compared with all strokes diagnosed during the same period, this frequency is 42.44 % . The average age of our patients was 58.66 years old . The sex ratio was 0.66 . Traders (34.25%) were the most affected. Risk factors plus found were hypertension (67.12%), obesity (February 6, 03%), and heart disease are (2 0.55%). CT showed the ischemic lesion sitting more in the Sylvian region (38, 36%) . The mortality rate in our study was April 2, 46%. The average length of stay was 1 4.32 days.

Conclusion: Ischemic stroke still represent a life-threatening medical emergency, hence the value of acting effectively on risk factors.

Keywords: Ischemic stroke , epidemiology, evolution, medical emergencies, CHU SO

INTRODUCTION

A cerebrovascular accident (CVA) is a neurological disorder characterized by the sudden onset of a focal neurological deficit of vascular origin. Known since the 4th century, it was called apoplexy by Hippocrates, because stroke survivors often become suddenly paralyzed and that their quality of life was deteriorating rapidly. [1] The World Health Organization (WHO) defines the A VC as the rapid development of localized or global clinical signs of cerebral dysfunction with symptoms lasting more than 24 hours that can lead to death, with no apparent cause other than an origin. vascular [2]. Advances in imaging, particularly the advent of CT and Magnetic Resonance Imaging (MRI), have significantly improved the specific diagnosis of stroke,

allowing a better understanding of their pathophysiology. Thus, ischemic strokes are occurring under conditions of partial or total obstruction of the lumen of a blood vessel leading to a downstream hypoxia and reduced metabolites necessary for tissue survival. They account for 80% of strokes [3]. In recent decades NCDs line up early in terms of death worldwide. Stroke is the third leading cause of death in the world after ischemic heart disease and cancers followed by infectious diseases [4] and the second cause in poor countries after heart disease [5].

In Togo, several studies on stroke have been conducted in the neurology departments but not in internal medicine. We conducted the present study to identify the epidemiological, diagnostic and progressive aspects of Ischemic stroke in the medical resuscitation of the University Hospital Center. Sylvanus Olympio of Lome.

MATERIAL AND METHOD OF STUDY

It had been a retrospective descriptive study conducted from 1 January 2011 to 31 December 2012 in the medical ICU CHU Sylvanus Olympio of Lome. Included in this study were all patients over 15 years admitted for ischemic stroke whose diagnosis was confirmed by a brain scan. Incomplete files that did not provide all the information needed to complete this study were excluded. Data collection was done using a pre-established questionnaire. The parameters analyzed are age, gender, occupation, marital status, personal history, toxic and drug habits, clinical signs and results of brain scan, evolution of the disease, length of hospital stay and the outcome of the patient's resuscitation. The data was processed and analyzed statistically with the "Excel" software and the "Epi Info version 6.04" software.

RESULTS

Description of the sample

A total of 73 patients had an ischemic stroke. The hospital frequency was therefore 3.62%. Compared with all strokes diagnosed during the same period, this frequency is 42.44%. The average age of our patients was 58.66 years with extremes of 30 and 90 years. The oldest age group was 50 to 70 years old. The sex ratio was 0.66. The most represented profession was traders (34.25%). The most common risk factors were hypertension (67.12%), obesity (26.03%), and heart disease (20.55%), as shown in Table I.

Clinical data

The mode of onset of symptoms was progressive in 61 patients (83.56 %). The reasons for consultation were dominated at the entrance are by consciousness disorders (84.94%), aphasia (26.03%) and hemiplegia (17.81%) as outlined in Table II.

Arterial hypertension was found in 60 (82.19 %) of our patients . The physical examination had found more hemiplegia (47.95%), facial paralysis (36.99%) as presented in Table III.

Paraclinical data

CT showed an ischemic lesion sitting more in the Sylvian region (38.36%), capsulo- lenticular (34 , 25% °) . Table IV shows the headquarters of the various ischemic lesions that were found in our patients. Glycemia ≥ 1.26 g / l was found in 23 patients (41 , 07) % as well as cardiac arrhythmia by atrial fibrillation in 11 patients (15.07%).

Scalable data

The morality rate of our study was 42 , 46%. The average length of stay was 14.32 days. In our series, 71 , 23 % of patients had a duration of hospitalization included less than or equal to 14 days .

DISCUSSION

We carried out this study in order to determine the clinical, scanner and evolutionary aspects of strokes in hospitals in Lomé. It emerged that their hospital frequency was therefore 3.62%. The average age of our patients was 58.66 years old. A female predominance with a sex ratio was 0.66. The most common risk factors were hypertension (67.12%), obesity (26.03%), and heart disease (20.55%). CT showed the ischemic lesion sitting more in the Sylvian region (38.36%). The mortality rate of our study was 42.46%.

Our study was retrospective. This can lead to a recruitment bias because many patient files have not been taken into account due to their lack of completeness. D Furthermore, the number of ischemic stroke may be underestimated because apart from the intensive care unit, there are also within the CHU versatile resuscitation is likely to receive other patient with stroke I. However, the sample we had before us seems representative in comparison with the data from the literature.

In our study, we noted a female predominance . This female predominance was found in Gabon by Kouna Ndouongo et al in 2007 [6]. This during other authors with more found a male predominance [7,8]. The bracket has the most age found in our study was that of 50 years s 70 years. This observation was made by other authors in Cameroon [9]. However, this age range varies by country and continent. While in Qatar it has been noted that many people under the age of 50 have suffered from stroke, this age was older than 7 years in Greece [10,11]. Patients with stroke I were traders (34.25 %). The traders are sedentary or at most practice a physical activity which is in this case very much less. This latter associated with other conditions could augment er prevalence facteu rs cardiovascular risks such as hypertension, and obesity found in significant proportion in our series. Thus, the presence of cardiovascular risk factors such as hypertension and obesity in our patients with AVCI has been found in various authors [8-11] . Many of its risk

factors are unknown to our rural population, and in many cases they are only discovered after a hospitalization for decompensation [12] .

In our series, the mode of occurrence has been progressive in 83.56% of cases. . Bonkougou et al [8] in Burkina-Faso and Samaké et al [13] in Mali also noted the presence of disturbances of consciousness at the entrance. High frequency of disturbances of consciousness by delay in hospitalization The reasons for consultation were dominated at entry by consciousness disorders (84.94%), aphasia (26.03%) and hemiplegia (17.81%) . Bonkougou et al [8] in Burkina Faso and Magagi et al in Djibouti had the same observation [14] . Arterial hypertension was found in 60 (82.19%) of our patients . This high frequency had also been found by various authors [7,8].

In our study, the scanner Cerebra realized allowed to note ischemic serving as at the cerebral region (38.36%) and capsular -lenticulaire (34.25% °) as etiology of DALY. A study already carried out in Togo had found a predominance of ischemic attacks at the level of the territory and specifically at the level of the deep middle cerebrum [15] . The mortality rate of our study was 42.46%. This rate is lower than that recorded in Burkina Faso by Bonkougou et al [8] and significantly higher than that found by Magagi et al in Djibouti [14] which found respectively 71.3% and 26.66% . This high rate of mortality found in our countries is due to the delay in the catch and the dilapidated technical plateau .

CONCLUSION

Ischemic strokes are common in medical resuscitation. They affect both sexes and the main risk factors are hypertension and obesity and hyperglycemia. The prevention of these DALYs therefore involves educating the population and controlling the main cardiovascular risk factors

REFERENCES

- Robicsek F, Roush T.S, Cook JW, Reames MK. From Hippocrates to palmasch, the history of carotid surgery. *Eur. J Vasc. Endovasc.surg*, 2004 ; 27: 389-397
- Aho K, Harmsen P, Hatanos et al. Cerebrovascular disease in the community: results of a WHO collaborative study. *Bull World Health Organ*, 1980 ; 58: 113-30
- Ossermann M, Mormont E, Marin V, Jamart J, Lalaux P. Identification des facteurs influençant le délai d'admission hospitalière après AVC ischémique. *Rev Neurol*, 2001 ; 157 :1525-1529
- Aidi S. Les Accidents Vasculaires Cérébraux Ischémiques : DAKAR; Cours Magistraux 2009, 13 :1,3-7.

- Lopez D, Mathers CD, Ezzati M. et al. Global and regional burden of disease and risk factors, 2001: Systematic analysis of population health data Lancet ,2006 ; 367:1747-57.
- Kouna Ndouango P, Millogo A, Siéméfo Kamgang FP, Assengone-Zeh Y. Aspects épidémiologiques et évolutifs des accidents vasculaires cérébraux au centre hospitalier de Libreville (Gabon). African Journal of Neurological Sciences, 2007 ; 26 (2): 12-7
- Pio M, Afassinou YM, Goeh-Akue E, Baragou. S, Koutche. K, Belo. M, Kumako. V. Autres facteurs concourant aux accidents vasculaires cérébraux chez l'hypertendu traité au CHU Sylvanus Olympio de Lomé. Rev Cames Santé, 2015 ; 3 (1) : 89-95
- Bonkougou P, Lankoande M, Bako YP, Tiendrebeogo YA, Simpore A, Kinda B, Kabore J, Sanou RAF, Ouedraogo N. Aspects épidémiologiques, cliniques, paracliniques, thérapeutiques et évolutifs des accidents vasculaires cérébraux dans le service de réanimation polyvalente du Centre Hospitalier Universitaire Yalgado Ouédraogo au Burkina Faso. Médecine d'Afrique Noire, 2014 ; 61 : 56-64
- [Chiasseu MM](#), [Mbahe S](#). Descriptive study of cerebrovascular accidents in Douala, Cameroon. Med Trop, 2011; 71(5):492-4.
- Ibrahim F, Deleu D, Akhtar N, Al-Yazeedi W, Mesraoua B, Kamran S, Shuaib A. Burden of Stroke in Qatar. [J Stroke Cerebrovasc Dis](#), 2015; 24(12):2875-9. doi: 10.1016/j.jstrokecerebrovasdis.2015.08.024. Epub 2015 Oct 23.
- [Vasiliadis AV](#), [Zikić M](#). Current status of stroke epidemiology in Greece: a panorama. [Neurol Neurochir Pol](#), 2014; 48(6):449-57. doi: 10.1016/j.pjnns.2014.11.001. Epub 2014 Nov 13
- Sagui E. Les accidents vasculaires cérébraux en Afrique subsaharienne. Med Trop, 2007; 67: 596-600.
- Samaké O. Evaluation du coût de la prise en charge des accidents vasculaires cérébraux au service réanimation polyvalente du CHU du Point G, Bamako, Thèse de Méd Bamako, 2007, 77 p
- Magagi A, Saada M, Adamou A. Les accidents vasculaires cérébraux (AVC) admis en réanimation : aspects épidémiologiques, thérapeutiques et pronostics à propos (15) cas. Rev Afr Anesth Méd Urg suppl, 2014 ; 19 (2) : 48
- Sonhaye. L, Tchaou. M, Adjenou. K, Agoda-Koussema. L.K, N'timon. B, N'dakena. K. Aspects scanographiques des accidents vasculaires cérébraux au CHU Campus de Lomé, togo (A propos de 314 cas). Rech. Sci. Univ. Lomé, 2011 ; Série D, 13(2) :31-36

Table I: Distribution of patients according to other cerebrovascular risk factors

	Effective	Percentage (%)
HTA	49	67.12
Obesity	19	26,03
heart Disease	15	20.55
ATCD AVC	14	19.18
Diabetes	13	17.81
Sedentary lifestyle	09	12.33
dyslipidemia	10	13.69

Table II : Distribution of patients by reason of consultation

MDC	Effective	Percentage (%)
Disorder of consciousness	41	56.16
Aphasia	19	26,03
Hemiplegia	13	17.81
Dizziness	07	09.58
headaches	06	08.22
Behavior disorder	06	08.22

Facial paralysis	04	05.48
hemiparesis	03	04.11
Digestive trouble	03	04.11
Seizures	02	02.71

Table III : Distribution of Patients by Clinical Signs in the Examination

	Effective	Percentage (%)
Hemiplegia	35	47.95
hemiparesis	21	28.77
Facial paralysis	27	36.99
Cardiac signs (IMO , TJ) *	05	06.85

Cardiac signs * : Lower Limb Edema (IMO), Turbulence of the Jugulaires (TJ)

Table IV : Distribution of patients by brain injury territories

	Numbers	Per cent (%)
sylvian	28	38.36
Lenticular capsule	25	34.25
thalamic	07	09.59
Intra - lenticular	03	04.11

Deep right	03	04.11
midbrain	02	02.74
parietal	02	02.74
Occipital	02	02.74
Under cortico-betal tale	02	02.74
Cerebro - meningeal	01	01.36
Cumulative nucleus	00	00,00
Total	73	100.00
