

Vascular cerebral accidents - Toxic habits

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ABSTRACT: Objective: Identify the report of toxic habits with the evolution to vascular cerebral accidents among residents of the prefecture of Skhirat-Temara. Method: Retrospective of lifestyle analysis identified patients and two family members or relatives. Keeping a questionnaire to the personal character interesting items, social and toxic habits. Inclusion criteria: residents of the prefecture of Skhirat-Temara with vascular cerebral accidents and two witnesses relatives of the same age, socio-economic and health life-like. Results: Our series included 136 individuals: 46 patients and other witnesses that meet the inclusion criteria. The incidence of vascular cerebral accidents is 11.7 per 100,000 inhabitants. Despite the reduced number of our series, we find that the results are concordant with those described in the literature, in particular gender, age, IMC, toxic habits especially active smoking and passive imposed on the entourage of smokers in the absence of the implementation of smoke-free laws in public areas. Conclusion: This study evaluates the impact of toxic habits in the pathogenesis of vascular cerebral accidents in the population studied. It provides food for thought regarding the measures to adequate prevention.

KEYWORDS: vascular, cerebral, accident, Skhirat, Temara, toxic, habit.

INTRODUCTION

The Cerebral Vascular Accident (CVA) is a sudden stoppage of brain function caused by stopping blood flow, which generates effects that depend on the damaged area and the extent of damage.

In Western countries CVA is the third cause of death after heart disease and cancer [1], the leading cause of acquired functional disability in adults, and the second cause of dementia. It has a major impact on public health in terms of mortality and morbidity as a result of generated effects: physical, psychological and social. In some countries such as France, each year there are more than 130,000 Cerebral Vascular Accident, one every four minutes.

The increase in the incidence of this disease is related to the aging population, the nature of the risk factors of this disease, the improvement of the living conditions of the population and increased expectancy life, which have favored the increase of cases of CVA in the elderly with fragile vascular system [2].

The determination of the modifiable risk factors justifies the implementation of a comprehensive policy to prevent and structured support in order to reduce the incidence and severity.

Toxic habits (smoking and alcohol) implicated in several diseases by their Impacts on vascular walls. They are also among the causes of CVA [3].

Our study concerned the population of the city of Skhirat- Temara, to determine among victims of CVA patients the existence of relationship between substance abuse and the onset of CVA.

MATERIAL AND METHODS

1 MATERIALS

The move towards a CVA may be secondary to a set of lived element in the patient's previous life.

1.1 WORKING METHODOLOGY

This is a case-control study of the population of the prefecture of Skhirat-Temara; from January 2011 to July 2014. The case is the patient who had a CVA, witnesses in number 2 are selected from members of the patient's family, if possible with the same gender, an age close to that of the patient, or the partner if a neighbor with similar living conditions.

We used a questionnaire to several items that we made complete by the investigating physician: a questionnaire for the patient with CVA and living in the prefecture of Skhirat-Temara, and two witnesses.

1.2 PRESENTATION OF THE PREFECTURE OF SKHIRAT-TEMARA (PST):

Prefecture Skhirat -Temara is located 20 km south of the capital Rabat. Covering an area of 1071.94 km².

The clinical study concerned the population of the PST, divided into ten cities including five urban and five rural shown in Table (Table 1)

Table 1. Distribution of Population by rural communities and urban:

Communes	Number of Inhabitants [4]
Urban commune of Temara	225084
Urban commune of Harhoura	9241
Urban commune of Skhirate	42580
Urban commune of Ain Aouda	25105
Urban commune of Ain Attig	17154
Rural commune of Mers El Kheir	14 488
Rural commune of de Sebbah	12 912
Rural commune of El Menzeh	5 999
Rural commune of Oum Azza	10 530
Rural commune of Sidi Yahya Zaers	28 773
Total	391 866

1.3 THE DIFFERENT PHASES OF THE STUDY:

The conduct of the study were divided into several phases (Table 2)

- Phase 1: This phase aims to focus on the health problem and its impact on the health profile and interactions with the system of life, the consultation of literature data and contact stakeholders.
- Phase 2: the choice of the working methodology based on a case-control study of the target population. The selected population is living in the prefecture of Skhirat-Temara constitutes a representative sample of the Moroccan population, as it integrates all the social strata of similar character to that of the general population.
- Phase 3: the completion of the study requires prior identification of the recruitment procedures of patients and diagnostic confirmation. To standardize the recruitment method, and also the diagnosis, a questionnaire that interests: sex, age, toxic habits, is completed by the same doctor who moves to the scene to identify all cases.
- Phase 4: the technical preparation of the project and patient recruitment.

Table 2. Different steps of the study

	January 2011	May 11	Jun 11	July 20 11- July20 14
Beginning	Phase 1			
Analysis		Phase 2		
Design			Phase 3	
Achievement				Phase 4

2 METHOD

The natural history of CVA that passed the critical step and the stabilization of the condition, the patient is put at the disposal of his family. So he lost sight of and identification is very difficult.

The approaches:

- Regular passes at health facilities (SS): health center, provincial hospital for the information of the medical and paramedical personnel in search of diagnosed or followed in these structures. Also explain the contact arrangements
- A passage at the pharmacies in search of cases that can be known or followed outside of health facilities.

Following case identification, the doctor moves the scene to:

- Make sure of the diagnosis by clinical examination of the patient and his medical file if it exists, the type of treatment, the state of evolution and adaptation to the environment.
- To complete the questionnaires: one for the patient and two for family members or relatives.

The results are interpreted by:

- Statistical analyzes performed using SPSS software version 9.1.
- Statistical tests used in the analysis were varied bi Chi 2 tests.

RESULTS

Our study concerned 136 people, including 46 patients with CVA and other family members or relatives, with 97 men and 39 women. Participants in the study are all inhabitants of the PST. They belong to socioeconomic status variables.

The results obtained are reported in Table 3.

Table 3. Distribution of population by the variables studied

	Variable	With CVA	Without CVA	P value
Sex	male	69 (71.1%)	28 (28.9)	0.043
	female	21 (53.8)	18 (46.2)	
Age	<40	0	0	0.279
	40-50 years	8 (80.0%)	2 (20.0%)	
	> 50	82 (65.1%)	44 (34.9%)	
smoking	Non-smoking	33 (63.5%)	19 (36.5%)	0.036
	smoking	57 (67.9%)	27 (32.1%)	
Smoking inside the house	Yes	30 (56.6%)	23 (43.3%)	0.051
	No	59 (72.0%)	23 (28.0%)	

Our series includes 97 men and 39 women the percentage of women who presented a CVA is 46.2% vs. 28.9% of men and $p = 0.043$

The study population was divided into age group:

- In the age group of under 40 no detected cases
- For those between 40-50 years, 20% of population of this group (2 of 8 patients) had a CVA.
- As for the more than 50 years; was 35% (44 patients) of the population of this age who have a CVA.

Toxic habits especially active smoking is found in 32% of patients at 27 vs 19; $p = 0.0365$. Whereas passive smoking and that endangers the health of the exposed population, especially families and the entourage of the patients was 43% at 23 vs 23; $p = 0.051$

Alcoholism "does not fit into the toxic habits" of our population is that for religious obligations.

DISCUSSIONS

Our population includes all social strata, with a high proportion of disadvantaged and middle layer. However, the limitations of our study were the small number of patients, due to the lack of records of stroke or functional monitoring networks, basic data such as incidence, prevalence and mortality are not known with precision.

This study is one of the studies concerned with identifying the effects of toxic habits as risk factors for CVA among the Moroccan population. And it is based on a case investigation - witness, for the identification of CVA victim or not followed patients in health facilities. The study population consisted of 136 (46 patients and 90 controls) instead of 138 because, for two patients it was found that only one family member who meets the criteria for inclusion. The incidence of CVA in our population is 11.7 per 100,000. This is lower than that obtained in studies done in sub-Saharan Africa [5], this result is probably related to the non-identification by the survey of all CVA patients carrying. In our study we have 18 women with a CVA to 28 men. The difference is statistically significant, as shown in some studies also show a male predominance [6]. The male can be explained in this context that the men consult more, and are followed at the SS more than women, as men, especially those enrolled in a safety system can benefit of supported allowing them to monitor their health. The generalization of the whole population health insurance system can improve the management and visualization of CVA patients. In particular, women who after passing through the critical phase, they are delivered to their families.

This difference is not significant, even though the number of men is higher than women. [7] ; Which means sex is not a risk factor for the onset of a CVA. The classification by age of our series of study is required since the identification of the actual age is difficult at the lack of administrative document justifying age, especially among people in rural commune, sometimes even those urban municipalities, as the majority of them are new immigrants and date on their ID is estimated (lower by at least 5 years actual age); and preference was given to proceed with a classification by age; in the age group 40-50 was identified 2 patients; and 44 for the portion over 50 years and no case for the portion under 40 years. The difference is highly significant. This means that age is a primary risk factor for CVA, and the risk of CVA increases dramatically with advancing age. Several reasons can be incriminated: physiological; socioeconomic, vascular fragility, changes in underlying conditions, the increase in life expectancy secondary to improving the living conditions of the Moroccan citizen are that the number of subjects is growth inducing the emergence of a number of disease related to the aging population, among other cardiovascular diseases generating CVA such as high blood pressure (hypertension) and secondary metabolic syndrome to change eating habits that have left the Mediterranean diet to a diet based on fast food rich in salt, fat, sugar...

To this is added the toxic habits: In the population studied one type of addiction is adopted: it is smoking. (32.1%) of the smoking population has presented a CVA, for over 30 years, as it has been shown by biological data [8] that low exposures to tobacco, are capable of activating platelet aggregation and cause acute hemodynamic changes that may lead to problems with blood circulation. It probably short-term pro thrombotic effects and in the longer term by encouraging the development of atherosclerosis. These effects were observed among both consumers active than passive consumers. [9] Thus, smoking increases the risk of cerebral ischemia and as it was shown by a meta-analysis [10], the risk is doubled. And as it was found in the population studied 43.3% of patients consume their cigarettes in public places especially at home which increases the risk for their families. The implementation of the law prohibiting the consumption of the public areas cigarette [11] proves mandatory if you want to protect the population and reduce the incidence of CVA.

RECOMMENDATIONS

In a country like Morocco, good management CVA; to the shortage of specialists; the lack of specialized structures, non generalization of the safety system; appropriate steps are to be taken: primary prevention should focus on optimal control of the risk factors for CVA. It requires first recognition of CVA as a major public health problem. This forecast requires improving the means by adopting a political strategy based on two pillars:

- Access to care facilitated by the widespread social coverage, allowing medical and hospital care for the greatest number, a low cost or even free essential medicines, and improved accessibility...

- Behavior change includes the following: the ban on cigarette advertising; the bands against smoking and application of laws. In particular awareness among adolescents in schools and youth centers. Promote programs "health for all".

CONCLUSION

CVA is a public health problem, in addition to its high mortality and disabling side effects in particular in patients weakened by age, poor socio-economic conditions and lack of support structures specialized, great job and the focal point for relevant support should centralize at prevention.

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