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Research Article

Time of Arrival at Oñativia Hospital After a Cerebrovascular Attack (CVA)

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Abstract

CVA is the leading cause of disability and the second cause of death in the world and in Argentina it is the third leading cause of death. Once fast acting occurs, decreases the consequences (therapeutic window 3 - 4.5h (TW): "The time is brain"). In our hospital environment we do not have intravenous thrombolysis with rtPA (IT) for CVA ischemic. The only hospital that counts with medication in the region is the Hospital "El Cruce" of Florencio Varela. Our studio shows that the majority of patients (102: 77%) arrive at Hospital Oñativia in the TW to receive IT to avoid the complications that occur not receiving treatment. According to the bibliography with the IT in our study: 1. 33% of the patients who arrived before 3 hours (33.66 patients) would not sequels. 2. 75% of the patients who arrived before 3 hours would be left with definitive sequelae (56,25 patients). 3. 25% of the patients who arrived before 3 hours will not be able to resume never professional activity (18.75 patients). 4. Mortality of patients in our serious study: 1) Mortality at 7 days: 6.9% (7 patients); 2) Mortality at 30 days: 12.6% (12.9 patients); 3) Mortality at 1 year: 23.6% (24.1 patients).

Keywords: *Cerebrovascular Attack (CVA); Intravenous Thrombolysis (IT); Therapeutic Window (TW)*

Introduction

In Argentina there are 130,000 cases of stroke per year. This means that every four minutes, an Argentine suffers from this disease that kills a third of those affected and leaves aftermath [1]. CVA are the leading cause of disability and the second leading cause of death in the world [2]. In Argentina 18,000 people die a year from cerebrovascular disease (CVD) and it is nothing less than the first cause of disability and the third cause of death in our country. The treatment available to treat CVA ischemic is IT and thrombectomy with stent retriever (TSR). From the appearance of the first CVA symptom to the initiation of treatment in the hospital not should ideally spend more than 3 hours, maximum of 4 hours and a half for use IT. In our hospital environment we do not have IT for CVA ischemic because it is considered high cost and therefore, zone hospitals are not provided with these drugs [3]. In the hospitals in the region, the only one that has IT to treat CVA is located 10 km from our hospital. Time of arrival is approximately 25 minutes.

Objectives of the Study:

1. Determine the time it takes for patients to arrive at the hospital after a first CVA symptom.
2. Determine the epidemiological characteristics of CVD in our environment.
3. Review results published in other centers.

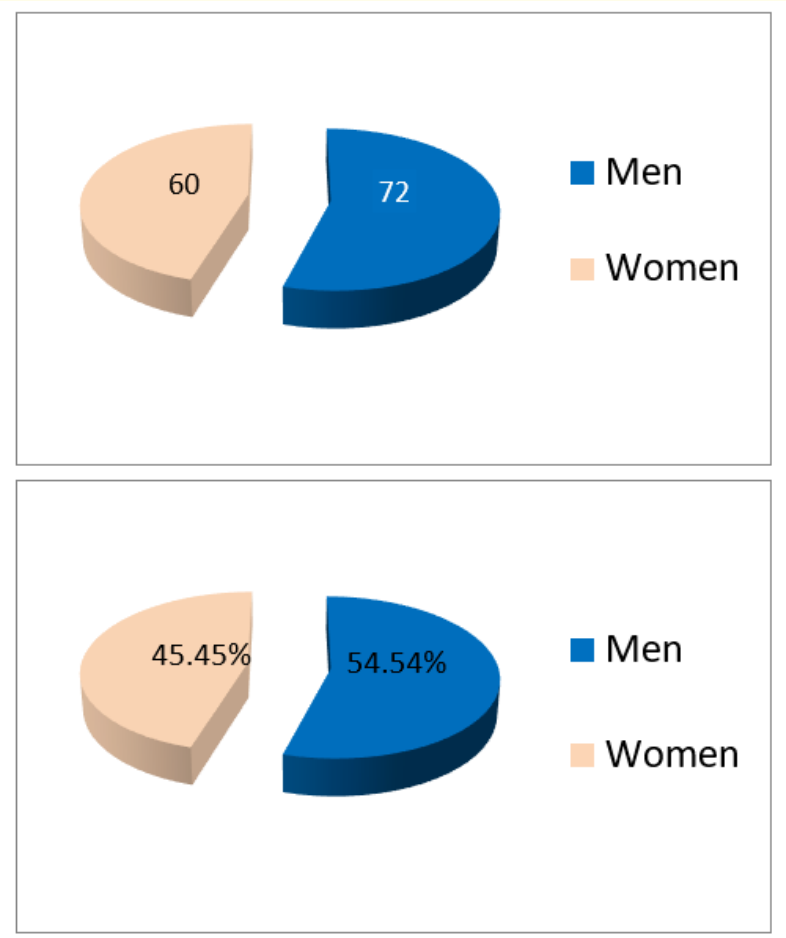
Materials and Methods

We carry out an observational and retrospective study. The place was the Hospital Oñativia, Alte Brown, Province of Bs As, Argentina. The work period was from May 2015 to May 2016. The mode of data collection was through medical records and questioning of patients and/or family members, on call, in the office, on the floor of a medical clinic and in a therapy unit intensive (ICU).

Our study admitted 132 patients who survived the first day of illness with CVA sharp. In it we evaluate personal and family history, first symptom, date and time of first symptom, date and time of medical assistance and CVA diagnosis.

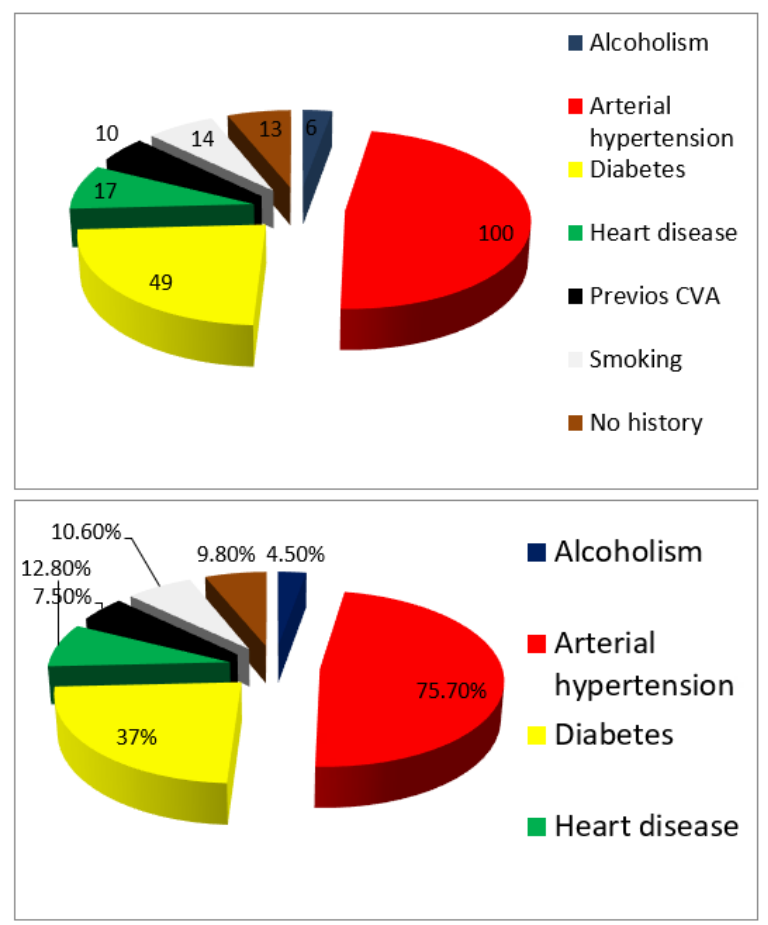
Results

132 patients with CVA were obtained (men 72: 54.54 and women 60: 45.45% with ages 30 to 90 years) (Graph 1).



Graph 1

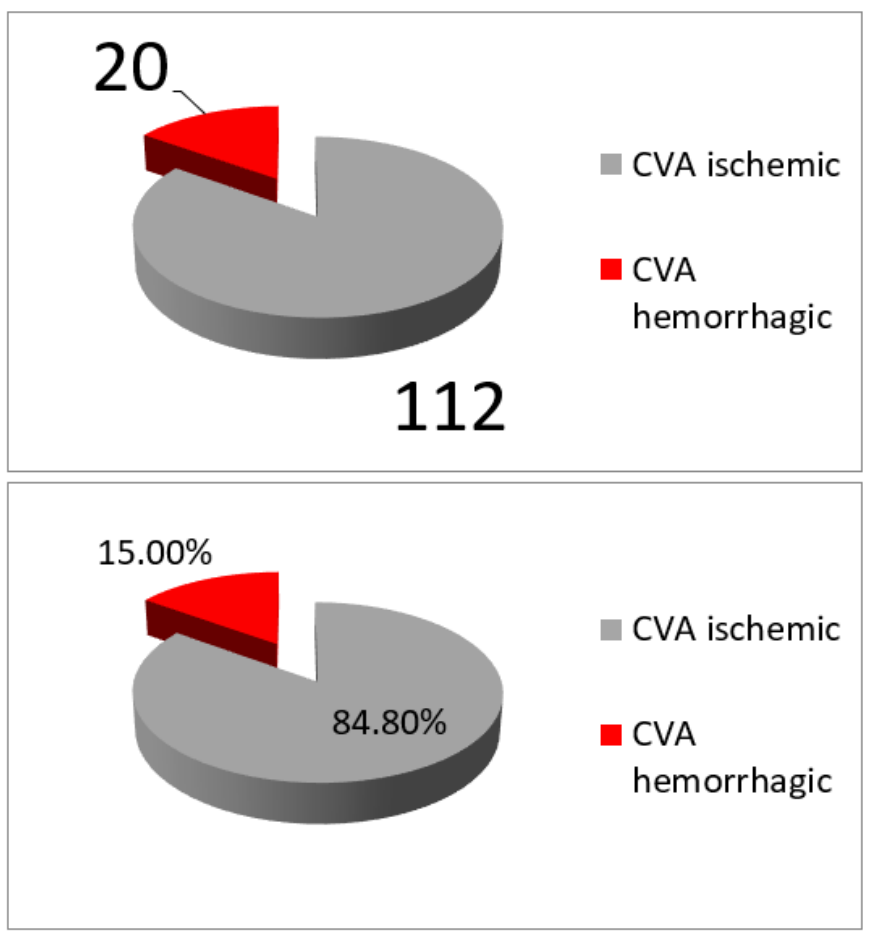
The antecedents in our environment are: alcoholism (6 patients: 4.5%), arterial hypertension (100 patients: 75.7%), diabetes (49 patients: 37%), heart disease (17 patients: 12.8%), previous stroke (10 patients: 7.5%), no history (13 patients: 9.8%), smoking (14 patients: 10.6%) (Graph 2).



Graph 2

In our study, the most common type of CVA was CVA ischemic (112 patients: 84.8%). CVA hemorrhagic was observed in 20 patients (15%) (Graph 3).

The time it takes for patients to get to the hospital after a first CVA symptom is 0 at 3 hours (102 patients: 77%).



Graph 3

Discussion

It is clear that IT has changed the evolution of CVA and that notably improves its evolution, reducing the aftermath. In our environment, the time of arrival at the hospital is not a limitation in 102 of 132 cases and the complexity of the hospital allows such treatment, so we try demonstrate that the use of this treatment is feasible in suburban area hospitals and its use to treat CVA and prevent disability in our patients deserves to be considered.

In our study, 77% of the patients arrived at the hospital before 3 hours after the start of symptoms. And the most common risk factor is high blood pressure.

Conclusion

Our study shows that most patients arrive at Hospital Oñativia in the TW to receive IT. Estimating that a third of our patients would have the opportunity to receive the IT and not remain with sequelae, thus avoiding economic, social and emotional care and rehabilitation.

Conflict of Interests

None to declare.

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