

THESES

A CROSS-SECTIONAL SURVEY IN A HOSPITAL POPULATION: CONSTITUTIONAL AND ENVIRONMENTAL FACTORS RELATED TO MIGRAINE (ABSTRACT)*. **THESIS. SÃO PAULO, 2000.**

*GETÚLIO DARÉ RABELLO***

A cross-sectional epidemiological study was done among a general population in a big hospital in São Paulo, Brazil. From an initial population of 1781 nursing personnel, 407 were called for a semi-structured interview based on a standard questionnaire.

The average age of the interviewed population was 32.6 ± 9.2 years old and 89.4% were female. Making use of the criteria of the International Headache Society, prevalence of migraine was detected in 53.1% of them (22.1% migraine without aura; 7.9% migraine with aura; 9.2% migraine with and without aura; 13.8% migrainous disorder not fulfilling criteria)

The clinical criterion most related to the diagnosis of migrainous disorder was the shortest duration of the migraine crises. The high patterns of prevalence were due to populational factors (mostly female people, age, and professional activity linked to service occupation) and to factors linked to the diagnostical characterization of the type of headaches.

The independent variables most related to diagnosis of migraine were family history, high levels in Epworth Sleepiness Scale and subjective perception of stress. Other variables were: gender, physical activity, exposition to vapours and type of professional activity.

Half of the population who suffered headache had already looked for medical support, and only 28.6% of doctors got to adequate diagnoses.

Once the social importance of the prevalence of migraine among this populational group, populational impact measures are proposed.

KEY WORDS: headache, migraine, prevalence, hospital personnel.

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EVALUATION OF THE CLINICAL AND ELECTROENCEPHALOGRAPHIC PROFILE OF A GROUP OF ADULT EPILEPTIC PATIENTS WITH CONTROLLED AND UNCONTROLLED SEIZURES FROM THE EPILEPSY CLINIC OF THE HOSPITAL UNIVERSITÁRIO DE BRASÍLIA. (ABSTRACT)*. **DISSERTATION. BRASÍLIA, 1999.**

*MARINICE CABRAL MORAES***

At the end of the Brain's Decade, epileptology was one of the fields of neuroscience that developed the most, because of the improvement of invasive and non invasive electroencephalographic methods, the progress in neuroimaging methods and in the techniques for epilepsy surgery, and last but not least the development of new antiepileptic drugs. In addition to that, the increasing concern about patients' readjustment and quality of life, makes necessary the re-evaluation of clinical and technological advances to ascertain the best possible treatment of these patients.

This study was carried out in order to outline the clinical electroencephalographic profile of a group of adult epileptic patients with controlled (GC) and uncontrolled (GNC) seizures and compare

the results with the ones published in the literature. Also, we intend to evaluate the value of our protocol for the classification and out-hospital follow-up of these patients.

We have studied 70 epileptic adult patients from the Epilepsy Clinic of the Hospital Universitário de Brasília (HUB), during the period of June 1997 to September 1999, using a standardized protocol to evaluate various factors related to the history and evolution of the epileptic seizures, their clinical features, personal and family history, physical and neurological examination, and quality of life. The electroencephalographic study (EEG) was performed according to standard practice and lasted 20 minutes to one hour with the patient awake and during sleep. The differences between the two groups were analyzed by nonparametric statistical tests: the chi-square test with Pearson's correlation and significance level of 5% and the Fisher's test when the expected frequencies were less than five.

Although these samples did not allow us to identify statistically significant differences between the two groups, the study allowed the detection of some variables in the clinical electroencephalographic profile of the two groups: 1) the age of onset of seizures was more precocious in the GNC; 2) the presence of epileptic seizures before the current episode was greater in the GNC; 3) the presence of status epilepticus is rare in the GC and frequent in the GNC; 4) family history of epilepsy is more frequent in GNC; 5) partial seizures predominate in the two groups, but in the GNC simple partial seizures evolve to complex partial seizures and then to secondary generalized seizures; 6) auras are more frequent in GNC patients; 7) temporal lobe epilepsy with typical EEG was common in GNC, whereas extra-temporal epilepsies prevailed in GC; 8) a first EEG provided the diagnosis twice more frequently in GNC; and 9) quality of life is worse in GNC where 20% of the patients have no activities in life. The use of our protocol within this group allowed us to classify all but 2.8% of the epileptic seizures.

The completion of our studies that dedicated more specialized attention to epileptic patients with controlled and uncontrolled seizures and with low social-economic resources, allowed us to conclude that: (i) epilepsy, despite all the technological improvements, is still a pathology dependent on clinical diagnosis; (ii) it is possible to diagnose accurately and treat correctly based only on clinical data and routine EEG; (iii) detailed studies such as ours permit the correct selection of patients for more detailed exploration and for surgical treatment; (iv) the improvement on quality of life of patients with chronic illness improves not only the control of seizures, but also the understanding and acceptance of the disease. In summary, we have evidence that the treatment of epileptic patients does not depend heavily on the usage of novel techniques and procedures, but above all remains a matter dependent on providing adequate medical attention and care to the patient.

KEY WORDS: epilepsy, clinical-EEG form, prognosis.

*Avaliação do perfil clínico e eletroencefalográfico de uma população de pacientes epiléticos adultos, controlados e não controlados, do Ambulatório de Epilepsia do Hospital Universitário de Brasília (Resumo). Dissertação de Mestrado, Faculdade de Saúde da Universidade de Brasília – UnB. Orientadora: Áurea Nogueira de Melo.

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INTERICTAL BRAIN SPECT IN PATIENTS WITH MEDICALLY REFRACTORY TEMPORAL LOBE EPILEPSY (ABSTRACT)*. **THESIS. RIO DE JANEIRO, 2000.**

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Introduction. The brain single photon emission computed tomography (SPECT) is a functional neuroimaging method that can detect localized changes in cerebral blood flow. Temporal lobe epilepsy (TLE) is the most common epileptic syndrome in adults, and more than 50% are medically refractory. The SPECT can contribute to investigation of epileptogenic focus and is one of pre-surgical evaluation methods of these patients.

Objectives. To evaluate the utility of interictal SPECT in localization of the epileptogenic focus in a population of patients from the Epilepsy Clinic of Neurology Service of Hospital Universitário Clementino Fraga Filho, Universidade Federal do Rio de Janeiro (HUCFF/UFRJ), with refractory TLE and normal brain computed tomography (CT) scans, studying the correlation between SPECT, electroencephalogram (EEG) and, in some cases, brain magnetic resonance imaging (MRI); to compare the results to some literature series; to contribute with data that will justify the implementation of an Epilepsy Program in the HUCFF/UFRJ.

Method. Transverse, prospective study, including 23 outpatients with medically refractory TLE, classified according to the International League Against Epilepsy (ILAE) criteria. Eleven (47.8%) were females, and the mean age at the moment of inclusion in this study was 30.34 ± 8.91 (18-49). The mean age of the illness onset was 12.21 ± 10.29 (1-35) and the time of illness was 18.13 ± 9.73 years (3-35). All of patients presented normal brain CT scans and scalp EEG with temporal epileptiform changes, when submitted to interictal etilendicistein dietil ester (ECD-^{99m}Tc) brain SPECT. Eleven patients had also performed brain MRI. The results were compared to the other six literature series, with similar sample population, after submitted to the same statistical treatment. Data are presented as middle \pm standard error (maximum-minimum). The statistical analysis was based on Fuzzy logics.

Results. Twelve (52.2%) of 23 patients had abnormal SPECT. Among these, five (41.6% of abnormal SPECTs) presented unilateral SPECT changes at the same side of the EEG (hypoperfusion in four and hyperperfusion in one), three (25%) presented bilateral hypoperfusion associated with bilateral EEG changes, and four (33.3%) presented unilateral hypoperfusion associated with bilateral EEG changes. Among the 11 patients who had performed MRI, 3 (27.2%) presented temporal lobe abnormality correspondent to the SPECT. The correlation index between SPECT x EEG (Pearson correlation = 0.998; $p < 0.0005$), SPECT x MRI (Pearson correlation = 0.998; $p < 0.0005$) and SPECT x EEG x MRI (Pearson correlation = 0.998; $p < 0.0005$) were highly significant, with significance levels at 0.01 and trust interval at 99% in all correlations.

Conclusions. The interictal brain SPECT was useful for the similarity of the EEG and MRI results. The correlation studies presented results comparable to the other literature series, with no significant deviations. Even so, the results of the SPECT indicate the necessity of to accomplish other complementary methods in the continue of the investigation, considering that results added up are associated with the diagnostic optimization to localize the epileptogenic focus and better therapeutic strategies.

KEY WORDS: temporal lobe epilepsy, diagnosis, single photon emission computed tomography, Fuzzy logics.

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STEREOTACTIC EVACUATION OF SPONTANEOUS INTRACEREBRAL HEMATOMAS (ABSTRACT)*. **THESIS. RIO DE JANEIRO, 1998.**

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Spontaneous intracerebral hematomas (SIH) occur in 15/100 000 people per year. Despite the better control of hypertensive diseases, SIH is responsible for 10% of strokes. Until this moment, there is no treatment of comproved efficacy for SHI. The decision on removing or not a deep hematoma for opened craniotomy or stereotactic evacuation remains controversial. However, the high mortality (43% in 30 days) associated to non surgical treatment suggested the necessity of precocious and innovated techniques, for better results.

The objectives are to review the literature, evaluating the results of large series and to purpose the application of the stereotactic evacuation in our centre.

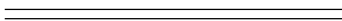
This study summed up many articles, that have been published since 1972, on stereotactic evacuation of SHI. It tried to emphasize the importance of computed tomography guided stereotactic evacuation of SHI to treat a disease of high rates of morbidity and mortality, studying in large series the indications and characteristics of the SHI that make them candidates for stereotactic evacuation.

Stereotactic evacuation of SHI is an easy, minimal invasive technique, particularly indicated in deeply localized hematomas. The risk of bleeding after evacuation is low (<2.5%), and its occurrence can be detected and controlled during the procedure. The duration time for this technique is smaller than for conventional surgery, and it can be accomplished in severely compromised patients, under local anesthesia and sedation. Clinical and experimental trials showed progressively better results with this technique.

KEY WORDS: intracerebral hematoma, stereotactic neurosurgery, arterial hypertension.

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