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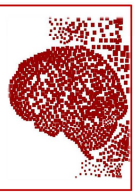

Pôsteres apresentados no XXVIII Congresso Brasileiro de Neurologia em São Paulo/SP.

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UNEB
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EFFECTS OF CANABIDIOL IN FREQUENCY OF EPILEPTIC SEIZURES

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INTRODUCTION

Currently an average of 30% of epilepsies are refractory to the more than 20 drugs available in the market. Various social and economic interests oppose the possible beneficial effects of the most abundant component of cannabis, limiting therapeutic study and access to epidemiological data on use and effects.

OBJECTIVE

To establish the safety and efficacy of cannabidiol (CBD) in reducing the frequency of epileptic seizures when used as monotherapy or in combination therapy in patients with difficult to control epilepsy.

METHODS

Study design:
Systematic review according to the *Preferred reporting items for systematic review and meta-analysis protocols* (PRISMA-P)

Eligibility criteria and database:
. Experimental studies that described the effect of Cannabidiol (CBD) on the frequency of epileptic seizures.
. Written in English, Portuguese, Spanish or French.
. Available on the following databases: PubMed, *Biblioteca Virtual de Saúde* and SciELO

Search:
. The terms "epilepsy" and "cannabidiol" were used as descriptors, in according with the MeSH (*Medical Subjective Heading*) and DeCS (*Descritores em Ciências da Saúde*) vocabulary, combined with term "AND".

Study selection:
. Articles were selected independently by two reviewers in three steps: triage by title, by abstract and by full article reading.

Data collection process:
. For each selected article, data regarding the objective of this review were computed and analyzed. We collected data about the characteristics of the sample and the control group; type, dose and extraction site of the cannabidiol; the use of other anticonvulsants; and the frequency of seizures before and after the use of CBD.

Risk of bias:
. Risk of bias was assessed with the CONSORT (Consolidated Standard for Reporting Trial) scale.

RESULTS

. Six articles were included in this review.
. Three of them were double-blind controlled clinical trials and the other three were experimental uncontrolled studies in humans.
. **All studies showed a reduction in the frequency of seizures following the use of cannabidiol, with a percentage reduction ranging from 43.9% to total seizure control.**
. The most common adverse effects were sonolence, decreased appetite, diarrhea, vomiting, behavioral changes, and dizziness.
. The mean score of the studies in the CONSORT scale was 17.33 (± 4.68). No article scored less than 50%.

AUTHORS	SAMPLE/ CONTROL	DOSE CBD	SYNDROMES	RESULTS
Thiele (USA, Netherlands and Poland, 2018)	86/ 86	20 mg/ Kg/day	Lennox-Gastaut Syndrome	43.9% of reductions in frequency of seizures in CBD group.
Kaplan (USA, 2017)	5/ 0	2 – 25 mg/Kg/ day	Sturge-Weber Syndrome	3 to 5 patients had improvement of the seizure.
Devinsky (USA, 2016)	214/ 0	2 – 50 mg/Kg/ day	Dravet and Lennox-Gastaut syndromes	37% of the patients had a 50% or more improvement in the frequency of attacks.
Devinsky (USA, 2017)	61/ 59	20 mg/ Kg/day	Dravet Syndrome	62% of the patients had a decrease in the frequency of seizures in the CBD group.
Hess (USA, 2016)	18/ 0	13 – 50 mg/Kg/ day	Tuberous Sclerosis	Average change of 48.8% in the frequency of seizures.
Cunha (Brazil and Israel, 1980)	8/ 7	200 – 300 mg/ day	Multiple refractory epilepsies	4 patients had no epileptic crisis, 1 obtained absence of generalized Tonic -clonic seizures and 3 did not show a decrease in the frequency of seizures.

CONCLUSION

The therapeutic use of cannabidiol has been associated with a **reduction in the frequency of epileptic seizures**, as well as an **overall improvement in the quality of life** in individuals with refractory epilepsy. However, further randomized double-blind controlled trials are still required for internal and external validation.

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Hess EJ. [...] A preliminary, randomized, double-blind, placebo-controlled crossover study evaluating cannabidiol for the treatment of refractory epilepsy in tuberous sclerosis complex. Epilepsy Behav. 2016; 54: 152-5.
Kaplan EH. [...] Cannabidiol treatment for refractory seizures in Sturge-Weber Syndrome. Pediatr Neurol. 2017; 67: 41-45.
Thiele EA. [...] Cannabidiol in patients with seizures associated with Lennox-Gastaut syndrome (GWPCARE4): a randomised, double-blind, placebo-controlled phase 3 trial. Lancet Neurol. 2018.

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XXVIII Congresso Brasileiro de NEUROLOGIA

HEADACHE ONSET IN POST-STROKE PATIENTS ATTENDED IN A REFERRAL OUTPATIENT CLINIC

Laise Gisele de Souza, *Evelyn Moura de Assis, João Vitor Nunes Sobreira Cruz, Laís Emanuella Carneiro Coelho, Vine Oliveira Philadelpho, Ana Cecília Bispo Torres, Geovane Porto Massa Viana, Joab Cardoso Magalhães, Antonio de Souza Andrade Filho*

INTRODUCTION

Headache is a frequent neurological sequel in post-stroke patients, but there is a lack of epidemiological data within the literature when compared to the motor and sensory sequels.

OBJECTIVE

The main objective of the study is to identify the frequency of post-stroke headache and possible associations between the characteristics of the vascular event and the onset of headache in individuals followed at a specialized outpatient clinic in the city of Salvador, Bahia.

METHOD

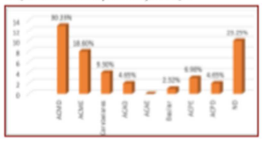
This is a retrospective study with medical records of 109 patients diagnosed with stroke, aged between 15 and 91 years old, attended between January and June 2017. Patients were characterized by gender, age, stroke type and subtype, etiology, affected vascular territory and the presence of systemic arterial hypertension. The Chi-square and Fisher tests were used for the associations, adopting a 95% confidence interval, using the SPSS program, 23.0 version. Insufficient data on medical records and a case of transient ischemic attack were exclusion criteria.

RESULTS

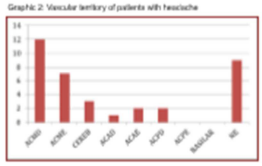
Table 1. Epidemiological and clinical profile

Variable	n = 109 (100%)
Headache x AVC	43 (39,45%)
Mean age (years)	58
Male	17 (39,45%)
Female	26 (60,46%)

Graphic 1: Vascular territory of the analyzed sample



Graphic 2: Vascular territory of patients with headache



Graphic 3: Relationship of headache X hypertension (SAH)

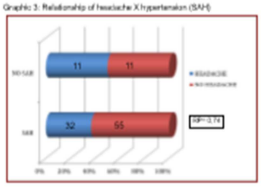


Table 2. Etiologies of AVC's population sampling

Types	Subtypes	n = 43 (100%)
Ischemic 32 (74,42%)	Inconterminate	12 (37,5)%
	Lacunar	6 (18,75)%
	Cardioembol.	3 (9,38)%
	Atheroscl.	2(6,25)%
	Not specified	9 (28,12)%
Hemorrhagic 10 (23,25%) *(20%) SAH (80%) IPH*	Hypertensive	5 (50%)
	MAV	1(10%)
	Aneurysm	1 (10%)
	Others	3 (30%)
NE 1 (2, 33%)		

DISCUSSION

According to the literature, in the studied population, a higher frequency was observed in females, with ischemic stroke being the main type, associated with a predominance of right hemisphere cerebral involvement[1]. Differently from some studies, a greater number of patients with post-stroke headache and higher age were found. It was also demonstrated a higher frequency of lacunar subtype, with statistical significance, a finding consistent with studies by Arboix (2006). In the present study, corroborating with the study by Mitsias (2006), a high frequency of hypertensive individuals who developed post-stroke headache was observed. However, the calculation of the prevalence ratio showed that hypertension was a protection factor. Some authors suggest that, in chronic hypertension, the alteration of the intracranial vasculature to a state of greater rigidity prevents the activation of trigeminal innervation, and may play a protective

CONCLUSION

Post-stroke headache is a common neurological sequel and seems to be associated with previous systemic arterial hypertension. Given the lack of articles on this matter, it is necessary to expand the profiling of these patients, in order to allow a better intervention regarding the prognosis, rehabilitation, treatment and implement of secondary preventive measures, aiming to reduce the occurrence of post-stroke headache.

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PROSPECTIVE PANORAMA OF DEMENTIA IN SALVADOR: A DEMOGRAPHIC AND DIAGNOSTIC APPROACH

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CASE PRESENTATION

Dementia is a syndrome characterized by cognitive decline that interferes in the social or professional activities of the individual, being a disease that mainly affects elderly population. There is a tendency in Brazil for population aging and, associated with this, the diagnosis of the different types of dementias is becoming more prevalent. The main objective of the study is to estimate the prevalence of different dementias in the city of Salvador, Bahia and the demographic characteristics of the diagnosed patients.

METHOD

A prospective longitudinal study that evaluated 173 patients over 60 years old by applying the screening test "Minimental State Examination Scale" in the city of Salvador, Bahia, Brazil. **103** patients had poor performance in the test and were evaluated and followed up in a medical consultation for cognitive assessment in the period from 2015 to 2018. The variables gender, age, ethnicity, education, income and result in Minimental State Examination Scale were analyzed.

RESULTS

75,7% were female

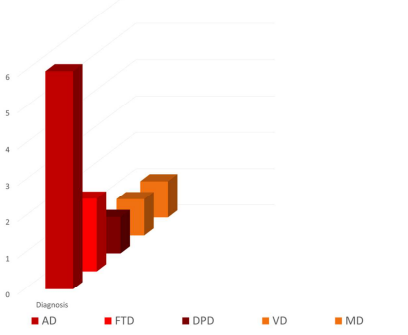
71 years was the mean age

R$ 726 Was the average household income (C2)

6 to 25 points Was the variation on Minimental

1-8 years Was the schooling of 66% of them

DIFERENT DIAGNOSIS OF DEMENTIA ON THE STUDY



AD=Alzheimer's Disease; FTD=Frontotemporal Demencia; DPD= Depressive Pseudodementia; VD=Vascular Dementia; MD= Mixed Demnetia.

DISCUSSION

The prevalence of dementia in the city of Salvador follows the world line: Alzheimer's Disease goes ahead, showing higher prevalence, followed by Frontotemporal Dementia, Vascular Dementia, Depressive Pseudodementia and Mixed dementia. There were no diagnosis of Lewy Body Disease. The vast majority of the study population has the risk factors for dementia: female, age over 65 and schooling less than 8 years. Being a health priority according to WHO, dementia in the elderly requires early diagnosis and universal recognition, according to their clinical and educational characteristics, for a better treatment and care of these elderly people.

FINAL CONSIDERATION

According to the literature, this study demonstrated a higher prevalence of Alzheimer's disease and also a correlation between schooling and the development of dementia. Although Alzheimer's disease is the most prevalent, it is important to have knowledge of differential diagnoses of Dementias in order to obtain early diagnosis and provide better therapeutics.

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Apoio:

LEUKOENCEPHALOPATHY ASSOCIATED WITH METHOTREXAT: A CASE REPORT

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Fundação de Neurologia e Neurocirurgia | Instituto do Cérebro

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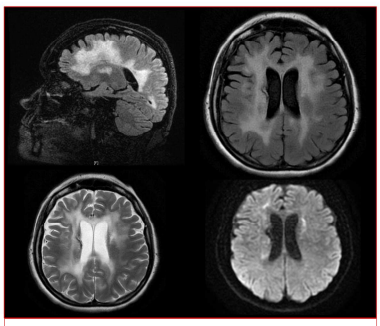
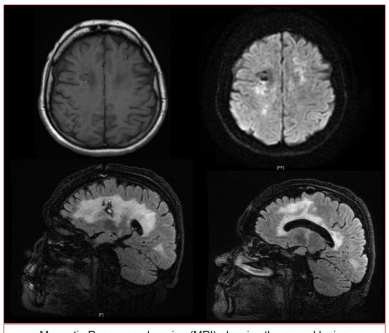
CASE PRESENTATION

A 39 years old woman, tertiary education, presented leukoencephalopathy and dementia during low-dose oral methotrexate (MTX) treatment. In 2013 she was diagnosed with Rheumatoid Arthritis and started oral MTX, referring few episodes of headache as an adverse effect. As of 2016, due to worsening headache and recent memory impairment, she began to make irregular use of medication on his own account for associating such complications to the MTX. In March of 2017, the patient presented slight cognitive impairment, compromising her laboral activities. Magnetic Resonance Imaging (MRI) of brain showed enhanced signal intensity in deep white matter and periventricular regions, on both hemispheres and almost through the whole extension of the corpus callosum. The MRI protons spectroscopy revealed demyelinating compatible metabolites, what was later corroborated by brain biopsy study. The cerebrospinal fluid (CSF) was normal. Rheumatoid factor and P–anca were positive, no other auto-antibodies were found. The neurologic picture worsened even after complete MTX stoppage, patient evolved with cerebellar damage, noted in new MRI, apraxia, speech disturbance, memory deficit, sphincter dysfunction and spastic quadriplegia, with a great impact in daily activities.



Magnetic Resonance Imaging (MRI) showing sign alteration in deep white matter and periventricular regions, on both hemispheres, suggestive of demyelinating disease.



Magnetic Resonance Imaging (MRI) showing the sequel lesion of the brain biopsy.

DISCUSSION

There are few case reports of brain toxicity induced by low-dose oral MTX treatment, however, the brain white matter alterations observed in MRI and the clinical condition, are similar to reports of leukoencephalopathy secondary to intrathecal or intravenous MTX therapy. The absence of finding in CSF contributes to the exclusion of differential diagnostics. Literature describes clinical pattern of progressive dysarthria, ataxia, unstable gait and cognitive impairment. An eight cases study revealed that 88% of patients present epileptic seizures, although that did not happen in our case. The pathogenic mechanism is still unknown in spite of trying to elucidate hypothesis of cumulative toxic MTX effect in the blood-brain barrier, as well as homocysteine accumulation.

FINAL CONSIDERATION

Leukoencephalopathy induced by MTX should be considered as a rare differential diagnostic of demyelinating lesions with pattern similar to the reactivation of JC virus, common in immunosuppressed patients.

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PSYCHIATRIC DISORDERS AFTER STROKE IN PATIENTS ATTENDED AT A NEUROLOGY OUTPATIENT CLINIC IN THE CITY OF SALVADOR/BA.

Laise Gisele de Souza; João Vítor Nunes Sobreira Cruz; Laís Emanuella Carneiro Coelho; Evelyn Moura de Assis; Leonardo Novaes Modesto Fernandes; Cícero Rodrigues Veloso; Antônio de Souza Andrade Filho

Fundação de Neurologia e Neurocirurgia | Instituto do Cérebro

INTRODUCTION

Stroke can lead to several clinical manifestations as psychiatric disorders, which occur by psychological and pathophysiological alterations. The main objective of the study is to Identify the frequency of psychiatric disorders after stroke and possible associations between characteristics of the stroke and the occurrence of psychiatric disorders on patients attended at a neurology outpatient clinic in the city of Salvador, in the state of Bahia.

METHODS

This is a retrospective study with secondary data in which were analyzed records of 109 patients with age ranging from 15 to 91 years old attended from January to June 2017. The variables evaluated were sex, age, classification of types and subtypes of stroke, etiology, brain vascular territory, cognitive clinical condition and presence of psychiatric disorders like depression. The associations were tested using chi-squared and Fisher tests. A confidence interval of 95% was adopted using SPSS 23.0 software. Patient records which had insufficient information and a case of transient ischemic attack (TIA) were excluded from the study.

RESULTS

Table 1: Characteristics psychiatric patients after AVC

VARIABLE	**n = 109 (100%)**
Psychiatric disorder	36 (33%)
VARIABLE	**n= 36 (100%)**
Female	23 (63,89%)
Average age (in years)	52
Depression	22 (61,1%)
AVCi	20 (55,5%)
AVCh*	13 (36,12%)/RP = 1,85
VASCULAR TERRITORY n= 36 (100%)	
ACMD	12 (33,33%)
ACME	7 (19,44%)
CEREBELAR	3 (8,33%)
ACAD	1 (2,8%)
ACAE	2 (5,55%)
ACPD	2 (5,55%)
NE	9 (25%)

Table 2. Etiologies of AVC's population sampling

Types	Subtypes	n = 32 (100%)
Ischemic 20(55,55%)	Indeterminate	10 (50)%
	Cardioembol.	3 (15)%
	Atherosc	3(15)%
	NE	4 (2)%
Hemorrhagic 13(36,12%)	SAH	3 (23,07%)
	ICH	9(69,23%)

DISCUSSION

It is recognized by the literature that the right hemisphere is the carrier of right hemisphere syndrome, characterized by communicative-cognitive-behavioral. In our study, the prevalence of depression was 61.11%, which is in agreement with a literature. Studies show that some anatomical regions are identified as psychopathological manifestations, such as frontal, temporal and cingulate lobes. It is known that the frontal lobe can be associated with a higher prevalence of Depression. In contrast, the main thing is the control of high frequencies of right hemisphere and increased involvement of the middle cerebral artery.

CONCLUSION

Psychiatric disorders are frequent among post-stroke patients and seem to be more related to the hemorrhagic type. Furthermore, the association which was described between cognitive alterations and psychiatric disorders can be analyzed considering the fact that cognitive alterations constitute a barrier for the autonomy of the patient and cause functional limitations for the individual disturbing they emotional state.

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XXVIII Congresso Brasileiro de NEUROLOGIA

CASE REPORT: LIMBIC ENCEPHALITIS AND ANTI-GAD 65

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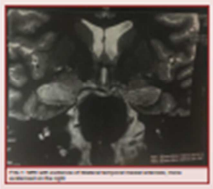
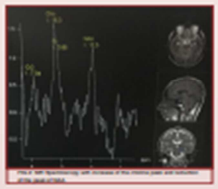
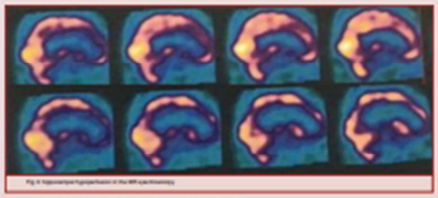
CASE PRESENTATION

A.L.C.P, 37 years old male, recent memory change. In 2018, he presented temporal disorientation, auditory hallucination, suicidal ideation, agitation and evident decline of recent memory, being diagnosed with Schizophrenia. He evolved with paresis, altered consciousness with psychomotor retardation and ocular manifestations.The Brain Magnetic. Resonance Imaging (MRI) revealed right mesial temporal sclerosis with an asymmetrical hippocampus and hypersignal increase in FLAIR-weighted sequence. Serology for CMV, HIV, Herpes, Hepatitis, TB and fungi were negative. Cerebrospinal fluid (CSF) examination revealed 28 leukocytes, glucose 44mg/dl and proteins 50mg/dl. Magnetic Resonance Spectroscopy (MRS) showed increased choline peaks in high cellular turn-over with reduction of NAA peaks, suggestive of Limbic Encephalitis (LE). Serum anti-GAD dosage was 2000 IU/ml. EEG was normal. The CSF antibody and blood panel showed the presence of GAD65 antibodies and negativity to LGI1, CASPR2, AMPAR, GABA(B)R, DPPX, NMDAR, Hu, Yo, Ri, Tr, CV2, amphiphysin, Ma1/2, SOX1 and ZIC4. Cancer screening was negative. Treatment with immunoglobulin (0.4g/kg for 5 days) was instituted, with improvement of his condition, maintaining recent memory loss and space-time disorientation (MMSE 17 and MOCA 16). Levetiracetam 500 mg/day with improvement of symptoms was introduced as a conduct.







DISCUSSION

Encephalitis is an inflammatory process of the Central Nervous System, which mainly affects the limbic structures. Studies show association with neoplastic syndromes, preceding the disease in years, besides alteration of the content of the conscience, ataxia, seizures and behavioral change. However, recent studies have shown that, in cases of positivity in antibodies directed to the membrane surface test, there is no association with neoplasia, reflecting a good prognosis. The patient of this study presented conclusive diagnosis for limbic encephalitis, with GAD65 antibody positivity; therefore, there is no association with neoplastic syndromes. Additionally, he clinically presented seizures, behavioral alterations and impairment of consciousness, corroborating with findings from the literature.

The literature shows that refractoriness to anticonvulsants is a reality in most cases of encephalitis, but there is a positive response to immunoglobulin therapy. However, between all the encephalitis forms, anti-GAD is the one that responds more slowly to immunoglobulin therapy. In the patient of this study, Levetiracetam was instituted with a positive response to the treatment with control of seizure and a slight improvement of the picture after institution of immunoglobulin therapy. It is necessary to consider differential diagnosis with psychiatric alterations, aiming at the early detection and treatment of encephalitis. Our patient, in the initial care at another service, was mistakenly diagnosed with schizophrenia; therefore, an extension of the time for diagnosis and delay in correct treatment. In addition, at tropical countries, alphavirus infection is a potential different diagnosis, in view of studies that demonstrated the involvement of the anterior part of the hippocampus resulting from the infection.

FINAL COMMENTS

The outcome of our patient is compatible with Limbic Encephalitis. Other studies should be performed on this important disease.

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XXVIII Congresso Brasileiro de NEUROLOGIA

CASE REPORT: *PATIENT WITH LAFORA'S DISEASE AND USE OF CANNABIDIOL OIL*

GEOVANE PORTO MASSA VIANA[1], KALLYANE MILHOMEM COSTA[1], MABEL COSTA ANDRADE[1], FELIPE REYNAN PAIVA VIEIRA[2], LAISE GISELE DE SOUZA[3], LARISSA IZAFLOR ORNELAS NUNES[4], ANTÔNIO DE SOUZA ANDRADE FILHO[5]

CASE PRESENTATION

A 18 years old male, caucasian, only child, born in Tobias Barreto, Sergipe, Brazil. Parents of diferente cities, deny consanguinity. According to them, the child had an adequate neuropsychomotor development until his first epileptic seizure, described as generalized tonic-clonic pattern (GCT), at the age of 7. The second seizure, of the same pattern, at age 14, when an electroencephalogram (EEG) showed generalized paroxysms. Treatment was then started with Valproic Acid 500mg/day, but the seizures remained refractory, with weekly episodes. When he was 16, in addition to GCT seizures, he had daily myoclonic spasms in the upper limbs and startle phenomenon. A skin biopsy was performed showing apocrine glands with cytoplasmic eosinophilic inclusions, compatible with the clinical hypothesis of Lafora disease. New EEG showed disorganized basal activity and irritative activity of projection in the occipital regions, activated by the tests of hyperpnea and photostimulation. Magnetic resonance imaging of the skull showed no abnormalities. Thereafter, levetiracetam 500 mg/day and clonazepam 1 mg/day were introduced, and the dose of valproic acid was adjusted to 1500 mg/day. This therapeutic modification resulted in a reduction of more than 50% in the frequency of myoclonic, as well as a significant reduction in the frequency of GTC seizures. However, a progressive condition of cerebellar ataxia, dysartria, cognitive decline, and loss of function appeared. In February 2018, cannabidiol oil was introduced for 8 weeks, after which it was noted a 90% reduction in the frequency of myoclonus as well as total control of GTC seizures.

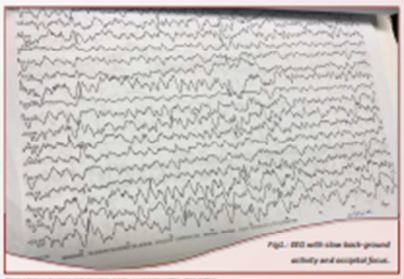
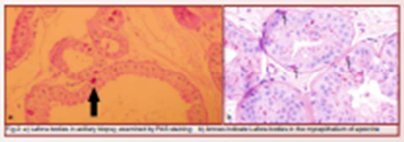


Fig1.- EEG with slow back-ground activity and occipital focus.



DISCUSSION

Lafora's disease is included in the generalized motor myoclonic epilepsy group. It is a metabolic disease, genetic autosomal recessive, mapped to chromosome 6q24 in 70% of cases and 6q22 in 27%. Due to the vast clinical presentation of signs and symptoms, a differential diagnosis should be made with several other pathologies. Deep skin biopsy is the primary method for diagnosis, PAS positive cytoplasmic inclusions are found in liver, muscles, sweat glands and nerve tissue.

The EEG has an early alteration and usually presents with slow back-ground activity and irritative activity may occur in variable combinations mainly occipital and associated to the photostimulation. For some authors the dysfunction of glycogen metabolism would be the main epileptogenic factor.

It is known that the effects of treatment with derivatives of the Cannabis plant have been studied and applied for thousands of years by the most diverse medical systems. Recently, the applicability of cannabidiol has been highlighted in reducing the frequency of seizures that are refractory to conventional treatment. The presented patient became an ideal candidate for treatment with cannabidiol showing positive results.

FINAL COMMENTS

Despite the limited therapeutic options for this pathology, the introduction of levetiracetam promoted a significant improvement in the frequency of seizures and cannabidiol oil showed an even greater positive impact on the reduction of myoclonus and control of epileptic seizures during the period it was administered.

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Lacunar stroke: higher risk of developing headache?

Laise Gisele de Souza; Laís Emanuella Carneiro Coelho; Evelyn Moura de Assis; Leonardo Novaes Modesto Fernandes; Cícero Rodrigues Veloso; João Vítor Nunes Sobreira Cruz; Antônio de Souza Andrade Filho

Fundação de Neurologia e Neurocirurgia | Instituto do Cérebro

INTRODUCTION

Headache is a frequent neurological sequel after stroke, but it is less studied when compared to motor and sensory deficits. The main objective of the study is to analyze the interrelation ship between lacunar stroke and the risk to develop post-stroke headache.

METHODS

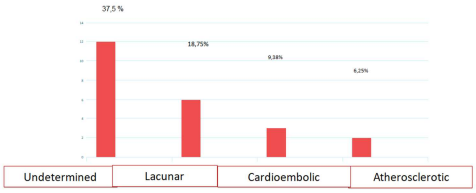
It is a retrospective study that analyzed data from 109 patients with stroke in the period from January to March 2017. Patients with headache were divided into two groups, the first composed of those with headache and lacunar type stroke, and the second, with headache and other types of stroke. A Chi-squared and Fisher tests were used for the associations, adopting a 95% confidence interval through the SPSS program version 23.0.

RESULTS

Table 1: Characteristics patients after AVC

Variable	n = 109 (100%)
Headache x AVC	43 (39,45%)
Mean age (years)	58
Male	17 (39,45%)
Female	26 (60,46%)

VARIABLE	n = 109 (100%)
AVC ischemic	77 (70,64%)
AVC i x headache	32 (41,55%)



DISCUSSION

In our study it was found a higher frequency of the Lacunar subtype. In agreement with this finding, a study by Arboix et al. found a higher frequency of headache in the lacunar infarcts located in the cerebral gray matter or in the brainstem compared to the lacunar infarcts located in the supratentorial white matter. The authors suggested that the higher frequency of headache in deep gray matter infarcts may be related to a higher concentration of glutamate in gray matter than in supratentorial white matter and that the excitotoxic action of glutamate may contribute to this difference

CONCLUSION

Post-stroke headache is a common neurological sequel and seems to be associated with previous systemic arterial hypertension. Given the lack of articles on this matter, it is necessary to expand the profiling of these patients, in order to allow a better intervention regarding the prognosis, rehabilitation, treatment and implement of secondary preventive measures, aiming to reduce the occurrence of post-stroke headache.

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CLINICAL AND EPIDEMIOLOGICAL PROFILE OF CHILDREN AND ADOLESCENTS WITH EPILEPSY FOLLOWED UP AT A SPECIALIZED OUTPATIENT CLINIC.

Pedro Augusto Assis Lopes, Laise Gisele de Souza, Leonardo Novaes Modesto Fernandes; Ivã Taiuan Fialho Silva; Felipe Reynan Paiva Vieira Santos; Larissa Izaflor Ornellas Nunes; Renata Brandão Santos; Cícero Rodrigues Veloso; Milena Gomes Almeida; Dr. Antonio de Souza Andrade Filho

INTRODUCTION

Epilepsy is one of the most frequent neurological disorders in childhood, with a prevalence of four to six cases per 1000 children. About 50% of the cases occur in children under 5 years of age and the incidence up to 16 years is approximately 40 per 100,000 children per year. Epileptic seizures in pediatric population result from neurological conditions that lead to neurobiological, cognitive and psychosocial outcomes. Because epilepsy has different presentations, it is essential to know the clinical and epidemiological characteristics of the disorder for better therapeutics and prognosis.

METHODS

It is a descriptive, retrospective cross-sectional study of children and adolescents with epilepsy treated from January 2017 to June 2018. Data were collected through free and clarified consentient, organized using a standardized online form and analyzed by SPSS version 21.0

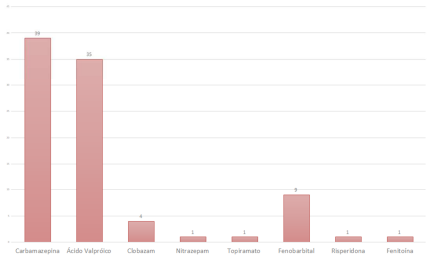
RESULTS

Our initial sample consisted of 81 patients from which 14 individuals were excluded due to lack of data, resulting in a final sample of 67 individuals. The majority observed were men (68.7%), mean age of 12.6 years (SD 3.89) at the time of research. The mean age at the first occurrence of seyzures was 4.2 years (SD 4.12). The majority of patients had a stable clinical condition (74.6%) and did not present seizures in the month prior to the latest medical appointment. According to ILAE classification, we observed that the majority of seizures had a generalized onset (62.7%), composed mostly by 36 patients with generalized tonic-clonic seizures, while focal onset seizures (34,2%) had a majority of tonic seizures, seen in 5 patients. Concerning therapy, monotherapy is the most common, seen in 77.6% of cases, and the epileptic drugs most frequently used in general were Carbamazepine (58.2%) followed by Valproic Acid (50.7%).

Chart 1. Epidemiological and clinical profile (*n*, number of patients from wich data was analyzed)

Variable	n = 67 (100%)
Mean age (years)	12,6
Male	68,70%
Female	31,30%
Mean age at fist episode	4,2
Generalized	62,7%
Focal	34,2%

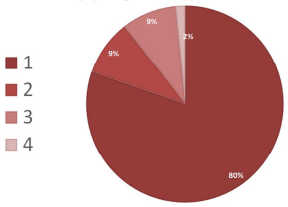
Graphic 1. Most used Anti-epileptic drugs.



DISCUSSION

Epilepsy is one of the major neurological problems in children. Our study showed, in consonance with literature, a higher prevalence in the male gender3,4. The beginning of de epileptic seyzures has a higher prevalence in children over 4 year old, what is similar to what was found by Maia C. et 4 although it disagrees with other studies that found a higher prevalence in the first years of life 1,2,5. That disagreement can be explained considering the heterogenity of the population compared, from different ethnical, social and nosological questions and also the time spent until the diagnosis is made, once some of the patients from our study are from country places, distant from referenced centers and cannot receive appropriate neurological care, resulting in a delay on diagnosis and specified treatment. In spite of that. The major type of seyzures on children were already demonstrated on literature 2,4, being the generalized Tonic Clonic seyzure (TCG), althoug there have been some controversy in the study of Unver 5, demonstrating a higher prevalence of focal seyzures. As the Tonic Clonic seyzure may have a more identifiable pattern, this may be the reason why it has been seen the most. Considering treatment, monotherapy as the most seen type of treatment, as also as carbamazepine as the most prescribed drug, remain concording with the literature5.

Graphic 2. Number of ani-epileptic drugs used in therapy



CONCLUSION

Our population sample has demonstrated a majority of male patients, with mean age of first epileptic episode at 4,2 years, mostly with generalized pattern. The most part presented a controled state of epilepsy with at least one month until last seyzure occurrrence, and most of the therapy strategy used was monotherapy, while the most used anti-epileptic drug was carbamazepine

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XXVIII Congresso Brasileiro de NEUROLOGIA

EPIDEMIOLOGICAL PROFILE OF TRAUMATIC BRAIN INJURY (TBI) IN BRAZIL FROM 2010 TO 2017

FELIPE REYNAN PAIVA VIEIRA SANTOS[1], ALANA OLIVEIRA SANTOS[1], LÍVIA DE ALMEIDA ANDRADE[2],GEOVANE PORTO MASSA VIANA[3], ANTÔNIO DE SOUZA ANDRADE FILHO[4]

INTRODUCTION

TBI is a "silent epidemic" that causes disability and death in the world, especially in adults of productive age. In Brazil, it is known that occurrences increase each year and have an impact on quality of life and, in some cases, severe neurological sequelae. It is imperative, based on incidence statistics, to recognize the magnitude of the problem and to adopt measures to prevent injuries and promote health.

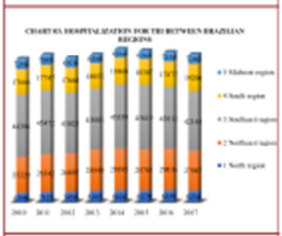
OBJECTIVE

To describe the epidemiological profile of the incidence of TBI in Brazil between 2010 and 2017.

METHOD

This is an ecological, descriptive, cross-sectional study using DATASUS data and the Hospital Information System (SIH). We accessed "External Causes, by place of hospitalization - from 2008", in "Brazil by region and unit of federation". The sub-item "Intracranial Trauma" (S060-069) was selected from the ICD-10 list in the period between 2010-2017. The distribution of hospitalizations in Brazil was analyzed by macro-regions, involving variables such as gender, color/race, age group, deaths and expenses.

RESULTS



DISCUSSION

According to some studies in the literature, this study showed a higher incidence in adults younger than 40 years of age, due to accidents with motor vehicles and with a growing peak in the elderly, traumas due to falls, thus portraying the increase of longevity in Brazil. This study provides information for primary, secondary and tertiary prevention.

CONCLUSION

The increase of 3.5% in hospitalizations, costs and benefits represents a financial and social investment, especially because the TBI affects in particular young adults, in an economically active phase, thus impacting on the HDI and the higher expenses with social security. In addition, there is an increased incidence in the elderly, which implies greater morbidity and death rate. Thus, public policies are needed to prevent TBI, reduce costs and establish neurotrauma epidemiological vigilance centers.

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CLINICAL-EPIDEMIOLOGICAL PROFILE AND SURVIVAL OF PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS FOLLOWED AT A REFERENCE CENTER

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BACKGROUND

Amyotrophic Lateral Sclerosis (ALS) is a disease characterized by progressive weakness with atrophy, fasciculation, hyperreflexia or hyporreflexia and labioglossopharyngeal paralysis that causes disability and death[1].

OBJECTIVES

To describe the clinical-epidemiological profile and to know survival data of patients with ALS followed at a reference center.

METHODS

A retrospective study was conducted with data from medical records of a time period of 2 years of a reference outpatient clinic. Were included in the study patients diagnosed with ALS by El Revisited (1998) criteria as determined by World Federation of Neurology with at least one imaging exam – MRI scan or CT scan of the brain/spinal cord – and a electroneuromyography. Exclusion criteria were: presence of other diseases that may lead to degeneration of upper and lower motor neurons or that may lead to symptoms similar to ALS, and those patients with a doubtful diagnosis. Kaplan-Meier survival analysis was performed to obtain the overall survival curve.

RESULTS

Table 1: Demographic data of the analyzed patients.

VARIABLE	n = 66 (100%)
Male sex	49 (74,2%)
Female sex	17 (25,8%)
Average age (in years)	50,5
White	40 (60,6%)
Brown	21 (31,8%)
Black	5 (7,6%)

Table 2: Symptons and clinical data of the analyzed patients.

VARIABLE	n = 66 (100%)
Beginning with distal symptons	48 (72,7%)
Beginning with proximal symptons	29 (43,9%)
Muscle weakness, myofasciculations and muscle atrophy	65 (98,5%)
Upper motor neuron syndrome	59 (89,4%)
Upper limbs hyperreflexia	42 (63,6%)
Lower limbs hyperreflexia	47 (71,2%)
Lower motor neuron syndrome	60 (90,9%)
Bulbar syndrome	47 (71,2%)
Difficulty in whistling and sucking	30 (45,5%),
Dysphagia	38 (57,6%)
Dysarthria	49 (74,2%)
Hoffman sign	21 (31,8%)
Babinski sign	47 (71,2%)

Table 3: Survival data of the analyzed patients.

VARIABLE	n = 66 (100%)
Mean survival time after diagnosis	5,26 years (median of 48 months)
Survival (up to 35 months)	75%
Survival (up to 96 months)	25%

DISCUSSION

The mean age found in our study was consistent with the average reported in other studies[1,2,3]. The sex ratio was 2.88 men for 1 woman, showing the male tendency for ALS, but there is evidence that this difference is decreasing over the years[4], perhaps due to women exposure to the same risk factors of men. Distal onset of symptoms was present in almost half of the patients, and some had both distal and proximal onset. However, it was not possible to compare with data already known because there were no papers demonstrating this type of classification. In our group of patients, the frequencies of weakness, dysarthria and dysphagia presented much higher percentages compared to findings in the literature[5]. Due to the patient's delay in reaching our service, our patients were evaluated in a later stage of the disease. For this reason, most patients already present almost all the signs and symptoms of ALS, even the symptoms of bulbar syndrome such as dysphagia and dysarthria. However, a large proportion of patients started with signs and symptoms of upper and lower motor neuron syndromes mainly. We can conclude that the majority of patients will present a decrease in muscle strength, myofasciculations, muscular atrophy and motor deficit with disease progression. In addition, our results demonstrate that dysarthria, dysphagia, and difficulty in whistling and sucking are less frequent in patients or occur in the later stages of the disease. In our study, the signs of hyperreflexia were more frequent than those of hyporeflexia. This result is confirmed in a study that had 71% of patients with hyperreflexia[6], a value similar to that found by us. However, Babinski's sign was present in only 6.5% of the patients in the study[6], compared to 71.2% of the patients in our group. The patients' survival also corresponded to those found in the literature[6]. After the onset of symptoms, the patient's survival is shorter than 5 years, and there are rare cases in which the patient survives longer[7]. In our study we had two patients who survived 10 years.

CONCLUSION

The mean age of participants of our study was similar to literature findings. The majority of patients will have decreased muscle strength, myofasciculations, muscle atrophy and motor deficit as the disease progresses. Furthermore, it was observed that dysarthria, dysphagia and difficulty in whistling and sucking are less frequent characteristics or appear in a more advanced stage of the disease, being found in 45,5% to 74,2% of the patients evaluated. Regarding survival, it was confirmed the need for investment in epidemiological research to identify and confirm risk factors for searching of solutions to achieve better survival with quality of life of ALS patients, thus improving prognosis.

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CLINICAL, ETIOLOGICAL AND TOPOGRAPHIC CHARACTERIZATION OF POST-STROKE PATIENTS IN A REFERRAL OUTPATIENT CLINIC.

Fundação de Neurologia e Neurocirurgia | Instituto do Cérebro

Laise Gisele de Souza; Lais Emanuella Carneiro Coelho; Evelyn Moura de Assis; Ana Cecília Bispo Torres; Vine Oliveira Philadelpho, João Vitor Nunes Sobreira Cruz; Antônio de Souza Andrade Filho

INTRODUCTION

Stroke can be defined as a sudden focal neurological deficit and is the leading cause of death in Brazil and one of the leading causes of disability worldwide. The objective of this study is to characterize patients diagnosed with stroke followed in a specialized outpatient clinic in the city of Salvador, Bahia

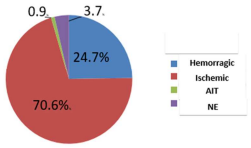
METHODS

In this cross-sectional descriptive study, we analyzed the profiles of post-stroke patients with regard to gender, age and clinical status of the patient, as well as stroke classification and subtypes, etiology and affected vascular territory. We analyzed the medical records of 109 patients aged between 15 and 91 years old, attended in the period of January to June of 2017.

RESULTS

Table 1: Epidemiological Characteristics and Population Sampling

VARIABLE	n = 109 (100%)
Average age (in years)	52
Women	61%
HIP	66,7%
Hypertensive etiology	48,1 %
Undetermined subtype	41,6%
Cardioembolic	16,9 %
ACMD	26%
Motor frame	66,1 %
Sensitive frame	40,4 %
Cognitive deficit	28,4%



DISCUSSION

It was found a mean age of 52 years and a higher frequency on female sex, which matches with results of a study that evaluated the profile of the brazilian population in 2014. Regarding the type, etiological diagnosis and impaired vascular territory, this study showed a higher occurrence for ischemic stroke of indeterminate etiology and carotid artery vascular territory, respectively, compatible with literature findings. As for the laterality of the clinical manifestations, the left side was the most affected, mainly with motor impairment. In addition, sensibility alterations were found as the second most common sequelae, unlike the studies that report being language disorders

CONCLUSION

Regarding the stroke type, etiology and affected vascular territory, this study showed higher occurrence of brain ischemia, stroke of unknown source and carotid arterial territory, respectively, which is consistent with literature data. We conclude that studying the profile of post-stroke patients, acknowledging the local socioeconomic status, is extremely important to define therapeutic strategies and to avoid new onset of events.

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