

CLINICAL ASPECTS, ELECTROMYOGRAPHIC AND EVOLUTION OF NEUROSCHISTOSOMIASIS PATIENTS (ABSTRACT)*. **DISSERTATION. RECIFE, 2004.**

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Mansoni schistosomiasis is a parasitic disease that assault nearly 10% of total Brazilian population, mainly from northwest, and it constitutes an important public health problem. The neurological presentation is especially severe because of motor, sensitive, sphincterian and erectile disturbances associated with neuroschistosomiasis, that are difficult to recuperate.

Objectifying to describe clinical and electromyography aspects of neuroschistosomal patients, analyzing clinical evolution, the author studied 47 patients, aging from 14 to 65 years old, 11 (23.4%) females, who attempted emergency or ambulatory consultation at neurological service of Hospital da Restauração, Recife, Pernambuco, Brazil, from 2000 June to 2003 June. One has evaluated clinical manifestations, magnetic resonance image alterations, cellular and biochemical characteristics of cerebrospinal fluid, ultrasound hepatosplenic findings, motor, sensitive and sphincter evolution and electromyography patterns, besides the relation of these findings and the motor clinical evolution after a median period of three months after hospital discharge.

Main clinical manifestations included isolated

sphincter disturbances (100%), motor deficit (95.7%) and sensibility alterations (83%). The anatomical level most frequently involved was low thoracic region from T6 to T12 (57.4%). Thirty four (91.9%) of 37 patients submitted to magnetic resonance presented hyposignal at T1 and hypersignal at T2, with contrast capture predominantly at thoracic region, isolated or extended to spinal cord cone. On cerebrospinal fluid, the findings were pleocytosis (93.6%) with lymphomonocytic pattern. Hepatosplenomegaly was absent for 32 of 38 (84.2%) patients submitted to abdominal ultrasound. Electromyographic pattern of 95.2% patients was compatible to axonal lumbosacral multiradiculopathy, with variable denervation extension, but predominant from level L2 to S2.

Within reevaluation, motor disturbances more frequently disappeared; the sensitive ones got better and sphincter ones did not alter. There was worst motor recuperation on patient with more extensive denervation at electromyography.

KEY WORDS: neuroschistosomiasis, electromyography, diagnosis.

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CLINICAL AND DEMOGRAPHICAL CHARACTERISTICS OF PEOPLE WITH EPILEPTIC CRISIS COMING FROM A CYSTICERCOSIS AND TAENIASIS ENDEMIC AREA IN BAHIA STATE (ABSTRACT)*. **DISSERTATION. SALVADOR, 2003.**

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Epilepsy is frequent all over the world, occurring independent of gender, age, race or social status. The highest prevalence rates occur in countries under development and are due to infectious parasitic diseases, like cysticercosis. Neurocysticercosis is the main cause of secondary epilepsy in the world because of its high prevalence in regions with precarious sanitary infrastructure. The study of epileptic crisis in

poor communities, with inadequate medical care and poor access to medication, allowed the analysis of a clinical evolution close to the disease's natural history. Besides, it represents the local community's reality and eliminates selection bias, different from studies conducted in reference centers.

Objective: To determinate the prevalence of epilepsy and to describe the clinical and demographical

characteristics of people with seizures in the city of Mulungu do Morro, Bahia State, Brazil, an endemic area for cysticercosis (1.6%) and taeniasis (4.5%).

Study design: 1. transversal cut for prevalence determination and 2. prospective cohort.

Method: Firstly, it was performed the health agents training for knowing the epileptic crisis trial questionnaire, and then these questionnaires were applied in a sample of the local population. The individuals suspected of seizures and 10% of the negative sample were evaluated by the group neurologists. At the same time, people with clinical picture suggestive of epilepsy were convoked by the region's radio system. All the epileptic individuals identified in the population or convoked were accompanied in the reference ambulatory installed in the city of Mulungu do Morro for this purpose. The patients formed two groups; those who came from the community and those from the ambulatory. The data were inserted in an ACCESS 2000 bank and analyzed with the statistic program SPSS version 6.0. It was considered 95% confidence limits and employed the Z, qui-square and Fisher tests, according to the variables analyzed.

Results: 456 families were evaluated, making a total of 2138 individuals. The prevalence of active epilepsy was 6.2 / 1000 and accumulated, including single seizure, 22.9 / 1000. It was not observed varia-

tion between genders. The most affected ages were from 11 to 30 years (75%). The majority (75%) of the seizures begun before the ages of 25. Comparing the results from both groups (community and ambulatory) there was no differences related to gender, age or beginning of the crises. In both it was observed a predominance of one kind of seizure and of partial and secondary generalized crisis. Among the patients who came from the community there were more frequent single seizure or with long periods between crises, more recent crises, inactive epilepsy and a greater number of patients not using any kind of anti-epileptic drug.

Conclusion: In Mulungu do Morro epilepsy presents high prevalence, occurring among all ages and with a higher frequency of start in childhood and adolescence. The seizures from the community's patients tend to occur in the isolated or recurrent form with long periods between them, the highest numbers of cases are found in the inactive form and without the use of medication. The patients who looked for the ambulatory have a worse prognosis because they present seizures more frequently and usually are using medication.

KEY WORDS: epilepsy, epileptic crisis, prevalence, cysticercosis.

* Características clínicas e demográficas de indivíduos com crises epilépticas em uma área endêmica para cisticercose e teníase no Estado da Bahia (Resumo). Dissertação de Mestrado, Universidade Federal da Bahia (Área: Neurociências). Orientador: Ailton Melo.

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EFFECTS OF IN VITRO AND IN VIVO TREATMENT OF MONOTERPENE PERILLYL ALCOHOL ON PROLIFERATION AND GENE EXPRESSION CONTROL OF HIGH GRADE GLIOMAS (ABSTRACT)*. DISSERTATION. RIO DE JANEIRO, 2003.

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The search for new chemotherapeutic drugs has increased, especially for those that have a natural origin. Perillyl alcohol (POH), is a naturally occurring monoterpene, found in the essential oils of citrus fruits and other plants, with pronounced chemotherapeutic activity and minimal toxicity in preclinical studies. Standard treatment of anaplastic gliomas and glioblastoma multiforme consisting of surgical resection, radiation therapy and/or chemotherapy is rarely curative.

This study aimed to evaluate in vitro and in vivo effects of POH treatment, cell proliferation, changes in morphology, protein synthesis, and migration of distinct lineage of glioblastoma cells.

It was chosen in vitro culture systems and in vivo assays for assessing cellular migration. In vitro treatment of POH at concentrations of (v/v) 0.003%, 0.02%, 0.03%, 0.3%, 3% and 30%, consistently inhibited proliferation of murine C6 and human A172 and U87MG of glioblastoma cells.

In vitro treatment of POH at low concentrations 0.03% v/v and 0.3% v/v also produced marked changes in cell morphology and inhibited protein synthesis. Likewise in vitro assays with 0.3% v/v POH treatment for 15 minutes, initially caused marked alteration in membrane permeability and later (50 minutes) drastic changes in the cytoarchitecture of C6, U87MG