

THESES

NEUROPSYCHOLOGICAL AND INTELLECTUAL STUDY OF CHILD AFTER ISCHEMIC OR HEMORRHAGIC STROKE (ABSTRACT)*. THESIS. CAMPINAS, 2008.

INÊS ELCIONE GUIMARÃES**

The cerebrovascular disease (CVD) during the childhood is rare and interferes drastically in the development of child. The aim of this study is to relate the neuropsychological findings in children with ischemic or hemorrhagic CVD, to variables that interfere in the disease, for example: recurrence, etiology, the age of the installation.

Thirty-two children with prior history of ischemic or hemorrhagic stroke, of both sexes in the age group from 6 to 16 years, were subduced to an neuropsychological, intellectual, visual-motor, school performance, cerebral blood flow evaluation; among others, the sample was selected from the Group of Studies in CVD in childhood and adolescence database of the HC of UNICAMP.

Twenty-five children also the hemorrhagic with 31.25%,

there was no difference in relation of sex, recurrence, seizures and the age of installation of the CVA. It was noticed that 87% grew with motor sequelae and 34.3% with an intellectual reduction.

The intellectual performance was more damaged facing these situations: sickle cell disease, premature age of the installation, recurrence, evolution of convulsive crisis, two hemispheres attacked, cortical-subcortical lesion and motor sequelae. It was checked, 18.7% of the children in the experimental group could not respond to the battery of instruments, suggesting that the lesion in the cortical an subcortical areas in early age produced severe cognitive damages.

Key words: cerebrovascular disease, intelligence quotient, childhood, SPECT, recurrence.

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SUGAR CANE BIOPOLYMER MEMBRANE AS DURA MATER SUBSTITUTE IN WISTAR RATS (ABSTRACT)*. THESIS. RECIFE, 2008.

FREDERICO DE MELO TAVARES DE LIMA**

Background: Duraplasty is necessary in nearly 30% of all neurological surgeries.

Objective: To determine the utilization of the sugar cane biopolymer membrane patch as a dural substitute in rats.

Method: Forty adults males Wistar rats weighing 300–440g were randomly divided into two groups: a control and an experimental. All animals were anesthetized with an intraperitoneal injection of chloral hydrate in solution of 10%, and placed in a prone position. Bilateral frontoparietal craniectomy was performed, and a dural defect was created. The arachnoid underlying defect was disrupted with a narrow hook. In the control animals, the defect was repaired with a disc of ePTFE. The experimental group received a membrane of sugar cane biopolymer over the cerebral cortex. No sutures in the dural patch were used in all cases. At the end of the procedure, the scalp was closed primarily in two layers. The rats were killed at 120

days. The heads were fixed by an intra-arterial injection of 10% formalin solution, followed by immersion in 10% formalin solution. After seven days of fixation, the specimens were embedded in paraffin, and the dural substitute and subjacent brain were collected en bloc. Histological sections of the biopsies were stained with hematoxilyn/eosin and evaluation was performed comparing healing and inflammatory reaction.

Results: All the animals survived to the period of 120 days to clinical observation. There were no cases of infection, cerebrospinal fluid fistulae, delayed hemorrhages, behavior disturbances, seizures and palsies. The histopathological changes of leptomeninges were semi-quantitatively scored according the inflammatory responses or foreign body reaction in the outer and inner surfaces of the membrane, the host capacity in contention the implants, and the propensity in assimilate the prosthesis. The histological findings didn't demonstrate statisti-

cal difference between groups concerning the parameters analyzed except that the biopolymer has been slowly absorbed ($p < 0.001$).

Conclusion: The sugar cane biopolymer membrane can

be used as dural substitute in rats and it evolves to be absorbed by the hostess.

Key words: dura-mater, sugar cane biopolymer, expanded polytetrafluoroethylene.

*Membrana de biopolímero de cana de açúcar como substituto de dura-máter em ratos /wistar (Resumo). Tese de Doutorado, Universidade Federal de Pernambuco (Área: Cirurgia clínica e experimental). Orientador: José Lamartine de Andrade Aguiar.

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CLIMACTERIC AND COGNITION: THE SCORES OF A SAMPLE OF CLIMACTERIC WOMEN IN MINI-MENTAL STATE EXAMINATION AND WORD-LIST MEMORY TEST (ABSTRACT)*. DISSERTATION. RIO DE JANEIRO, 2007.

RITA DE CÁSSIA LEITE FERNANDES**

Introduction: In Brazil, research on cognition and climacteric is scanty, despite the great prevalence of memory complaints in this phase of the female life. The objective of this research was to describe the scores of climacteric women in neuropsychological tests and to verify possible associations with sociodemographic, clinical, gynecological and depressive characteristics.

Method: 156 women, ranging from 40 to 65 years old, were evaluated with two neurocognitive tests and a depressive scale: Mini-Mental State Examination (MMSE), Word-List Memory Test (WLMT) and CESD (Center for Epidemiological Studies Depressive Scale).

Results: The average scores obtained in MMSE ($M=25.86$; $SD=2.67$) were different to the ones found in other stratum within the Brazilian population only to illiterate climacteric women, who scored higher ($M=21.72$; $SD=3.77$). There was a trend for underscoring only the questions

for attention and copy in the MMSE items. The average score in WLMT was similar to the ones obtained by other authors ($M=18.83$; $SD=3.82$). There were no significant relationships between the average scores on the tests and climacteric period, demographic characteristics, intensity of depressive symptoms and clinical or gynecological conditions, except for lower scores obtained by hypertensive women in WLMT. The Z score of nine women (5.7%) were found to be below 1.5 SD in WLMT.

Conclusions: We concluded that these average scores, in a specific population cut point, did not exhibit differences chargeable to their peculiar characteristics. The lowering of attention may justify some of the frequent memory complaints of climacteric women. The low scores obtained by some women in the WLMT requires further investigations.

Key words: climacteric, menopause, cognition, depression, neuropsychological tests.

*Climatério e cognição: desempenho de um grupo de mulheres climatéricas no mini-exame do estado mental e no teste de memória da lista de palavras (Resi,p). Dissertação de Mestrado, Instituto Fernandes Figueira / Fundação Oswaldo Cruz (FIOCRUZ) - Rio de Janeiro (Área: Saúde Coletiva). Orientadoras: Lizanka Paola de Figueirrrfp; Sílvia Eliane Vasconcelos Zahar.

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FREQUENCY OF MAJOR DEPRESSIVE DISORDER IN HTLV-I INFECTED PATIENTS (ABSTRACT)*. DISSERTATION. RIO DE JANEIRO, 2007.

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Introduction: Symptoms of depression are fairly common among hospitalized patients and they are part of the diagnostic criteria for major depressive episode, as defined by DSM-IV. These symptoms consist of changes in appetite, sleep disturbances, agitation or psychomotor retardation, fatigue or loss of energy, feelings of uselessness or excessive guilt, a decrease in thinking capacity or in concentration and recurring thoughts about death. Major depression is characterized by changes in mood and in interest levels, as well as other

symptoms, that persist in a period of at least two weeks. It occurs at a rate of 2 to 6.6% in the population at large and 5 to 10% in hospitalized patients. Symptoms of depression are common during or following viral infections. Nevertheless, showing an association between an episode of major depression and viral infections remains a controversial topic.

Objective: To evaluate the prevalence of the major depression episode and of symptoms of depression in patients infected with the HTLV-I virus.