#### **Theses**

# Giant intracranial aneurysms: morphological characterization and clinical correlation (Abstract)\*. Thesis. São José do Rio Preto, 2010.

Marcio Luiz Tostes dos Santos\*\*

Intracranial aneurysms are acquired dilatations of intracranial arteries located mainly at the arterial branching points near to the skull base.

**Objective:** The purpose of this study was to characterize morphologically giant intracranial aneurysms aiming correlation with clinical presentation.

Method: A total of 80 patients with giant intracranial aneurysms, 14 (17.5%) males and 66 (82.5%) females, were studied from January 2001 to January 2009 at the Vascular and Endovascular Neurosurgery Unit of the Hospital de Base of São José do Rio Preto, SP. Univariate and multivariate analyses were made to test the associations among demographic (sex and age), morphological (anatomical localization, type, quantity, laterality, and size), and clinical features (focal neurological deficit, seizure, headache, sudden headache, visual disturb, cavernous sinus syndrome (CSS), facial palsy, Hunt and Hess scale at diagnosis, Fisher's grading system). The protective effect against rupture of the giant aneurysm according to the vascular pattern of communicating arteries (good quality as patent communicating arteries or bad quality as hypoplasia or agenesis of communicating arteries) was analyzed using chi-square test by analysis of dependency.

**Results:** The main locations of the unruptured giant aneurysms included the carotid cavernous (35.7%) and supraclinoid (28.6%) arteries and the ruptured aneurysms the most frequent were carotid supraclinoid (33.3%) and middle cerebral (29.2%) arteries. Of all giant aneurysms, the type was saccular in 85% and fusiform in 15%. The main clinical presentations at the moment of diagnosis were headache (44.6%) and CSS (30.4%) in unruptured aneurysms and sudden headache (100%) and focal neurological deficit (12.5%) in ruptured aneurysms. There was a significant association among vascular pattern of communicating arteries of "bad" quality and presence of thrombus and calcification (p=0.005). The risk of rupture of giant aneurysms in relation to the presence of anterior and posterior communicating arteries of "good" quality is 8 times higher in patients with anterior and posterior communicating arteries of "bad" quality (OR 9.11,

95% CI 1.64 to 50.58; p=0.012) and 11 times higher in patients without thrombus and calcification (OR 12.73, 95% CI 0.98 to 165.99; p=0.05) when compared with patients with thrombus and calcification.

Conclusions: Giant intracranial aneurysms are more frequent in segments of the internal carotid artery, mainly in the cavernous in unruptured aneurysms. There is a high rupture risk of giant aneurysms in the region of the middle cerebral artery. In the region of the anterior cerebral artery the frequency of aneurysms is low. The increase in the size of giant aneurysms coincides with an increase in the Fisher's grading system. In giant aneurysm, communicating arteries of "bad" quality are associated with presence of thrombus and calcification. The rupture risk is significantly higher in patients without thrombus and calcification in relation to those with thrombus and calcification

**Key words:** giant intracranial aneurysms, morphology, clinical presentation.

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## Study of the quality of life in swallowing in patients with Parkinson's disease (Abstract)\*. **Dissertation. Recife, 2010.**

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Introduction: Parkinson's disease (PD) is a chronic and progressive disease, caused by the degeneration of dopaminergic neurons in the black substance, which results in changes in the motor system, such as resting tremor, bradykinesia, muscle rigidity and changes in postural reflexes. With the general worsening of the clinical condition, the Parkinson's patient can develop problems with swallowing, which represents a functional decline causing lower quality of life (QOL).

**Objective:** To assess the quality of life in swallowing among individuals with and without Parkinson's disease.

**Method:** The study was approved by the Committee for Ethics in Research involving Humans. The population comprised 103 individuals: 62 individuals with idiopath-

ic PD and 41 normal subjects. For the study we used the following instruments: original scale of Hoehn and Yahr Stages and the Quality of Life in Swallowing Questionnaire (SWAL-OOL).

Results: From the data analysis, it can be seen that there is a significant difference between the QOL in swallowing of PD patients, especially from stage 1 to 4 of the disease, according to the overall score. Regarding the specific areas that the questionnaire assesses, there was a significant difference in the fields of burden, duration of meal times, communication, social function, sleep and fatigue, when comparing stages 1 and 2 with stage 4. It was found that individuals in any stage of PD present a highly significant difference (p<0.0001) in QOL in swallowing compared to subjects without the disease, according to the overall score of the questionnaire. In the analysis of the domains of the questionnaire, it was found that the significant differences occur after the second stage. After this stage the score decreased significantly, representing the decline in quality of life.

Conclusion: The quality of life in swallowing of Parkinson's patients is impaired as the disease progresses. The application of SWAL-QOL in the studied population provides relevant information to health-care professionals about swallowing and other manifestations resulting from the decline of this function, which allows a better delineation of care.

**Key words:** Parkinson's disease, quality of life, swallowing, scale.

#### Prevalence of depression in multiple sclerosis (Abstract). **Dissertation. Salvador, 2011.**

Ana Paula Torres Guedes Andrade\*\*

Introduction: The association between depression and multiple sclerosis (MS) is customary (about 37 to 60% of patients), with a suicide frequency 7.5 times higher than in healthy individuals. Many studies point to a common physiopathologic basis between these pathologies; there is evidence of neurologic lesions that disconnect some regions of cerebral cortex and/or subcortical pathways, like the fronto-temporal detachment caused by lesions on the arcuate fasciculus, or the hypothalamus-mediated endocrine dysfunction caused by inflammatory activity.

The occurrence of this comorbidity in Brazilian population is yet underestimated. At Bahia, this datum does not exist. In addition, the drug treatment hasn't been effective.

**Objective:** To estimate the prevalence of depression and the clinical and demographic profiles of patients with MS and to evaluate the applicability of Beck's Depression Inventory (BDI) among these persons.

Method: It has been performed an analytic descriptive transversal study. The diagnosis of MS has been performed using Poser's criteria; to depression, it has been used the BDI, and a psychiatric interview has ensued, using the Mini International Neuropsychiatric Interview (M.I.N.I.) for further analyses. Patients with suspect of Devic's disease, and demential syndrome have been excluded, along with patients with acute exacerbation of MS, those who are on interpheron, or have less than two years of diagnosis of MS.

Results: 76 patients were included in this study. According to BDI criteria, 48.7% of the sample had depression, compared to 56%, following M.I.N.I. criteria. The concordance index between these two methods was almost perfect (kappa=0.84). 1 patient (1.4%) has suicided, and suicidal ideation was present in 21.3% of patients. The average age for presenting symptoms was 33.3 years, and the mean period of disease was 9.3 years. There was only a strong association between severe neurologic impairment and depression (p=0.05).

Conclusions: In accordance with current literature, depression among MS patients has higher prevalence than in other disabling neurologic diseases, corroborating with our datum of 48.7%. Although controversial, in our sample, depression correlated with a higher level of neurologic impairment and further disability. BDI may be an appropriate tool to evaluate depression in MS.

**Key words:** Multiple sclerosis, depression, Beck's Depression Inventory

### Evaluation of quality of life and sleep of individuals with Steinert's disease (Abstract)\*. **Thesis. Salvador, 2010.**

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The Steinert's disease (SD) is the most common form of muscular dystrophy with onset of symptoms in adult-

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