

THESES

BRAIN ARTERIOVENOUS MALFORMATIONS: MORPHOLOGICAL CHARACTERIZATION AND CLINICAL CORRELATION (ABSTRACT)*. DISSERTATION. SÃO JOSÉ DO RIO PRETO, 2007.

MARIO LUIZ TOSTES DOS SANTOS**

Introduction: Brain arteriovenous malformations (BAVM) are morphological and neurovascular abnormalities characterized by direct communication between arteries and veins, without interposition of capillary bed, therefore without resistance to blood flow.

Objective: The purpose of this research was to characterize morphologically brain arteriovenous malformations aiming correlation with clinical presentation.

Method: A total of 170 patients with brain AVM, 78 (46%) males and 92 (54%) females, were studied from January 2001 to January 2007 at the Vascular and Endovascular Neurosurgery Unit of the Hospital de Base of São José do Rio Preto, SP. Univariate and multivariate analyses were conducted to test the associations among demographic (sex, age), clinical (hemorrhage, seizure, focal neurological deficit, and headache), and morphological features (anatomical localization; superficial, deep, infratentorial or supratentorial location; nidus size; number of feeding arteries, compartments, and draining veins; type of venous drainage; presence of stenosis, venous ectasias, and arterial aneurysms; Spetzler-Martin classification).

Results: The main clinical presentations at the mo-

ment of diagnosis included hemorrhage in 89 (52%) patients, headache in 79 (46%), focal neurological deficit in 54 (32%), and seizure in 52 (31%). According to the Spetzler-Martin classification, grade I was found in 15 (9%) patients, grade II in 49 (28%), grade III in 55 (33%), grade IV in 41 (24%), and grade V in 10 (6%) patients. There was a statistically significant association among hemorrhage and small nidus size ($p=0.002$), single feeding artery ($p=0.007$), single draining vein ($p=0.003$), and single compartment ($p=0.040$). Seizure was positively correlated with medium (3–6 cm) and large nidus size ($>6\text{cm}$), and negatively with small nidus size ($<3\text{cm}$) ($p=0.021$).

Conclusion: Brain AVM with small nidus size, Spetzler-Martin grade I, single feeding artery and draining vein are associated with hemorrhage. Spetzler-Martin grade V was negatively associated with hemorrhage. In the brain AVM there is no association between aneurysm and hemorrhage. On the other hand, seizure show positive correlation with large nidus size and negative with small nidus size.

Key words: brain arteriovenous malformations, morphology, clinical presentation.

*Malformações arteriovenosas encefálicas: caracterização morfológica e correlação clínica (Resumo). Dissertação de Mestrado, Faculdade de Medicina de São José do Rio Preto (FAMERP/SJRP) (Área: Medicina Interna). Orientador: Waldir Antônio Tognola.

Address: Avenida Brigadeiro Faria Lima 5544, 15090-000 São José do Rio Preto SP, Brasil. (E-mail: marcio@cerebroecoluna.com.br).

SLEEP AND ITS DISTURBANCES AT PARKINSON DISEASE: POLYSOMNOGRAPHIC CHARACTERISTICS (ABSTRACT)*. THESIS. LONDRINA, 2007.

MONICA MARCOS DE SOUZA**

Sleep disorders are often seen in Parkinson disease patients, causing impairment to their quality of life. Studies over Parkinson disease, its sleep characteristics, and polysomnographic aspects, are uncommon.

Objective: To determine the main sleep disorders and its polysomnographic characteristics in patients with Parkinson disease in the Department of Neurology at the *Hospital das Clínicas* at Londrina State University (*Universidade Estadual de Londrina - UEL*), from 2005 to 2007. And to compare the results to a paired control population (control group).

Method: 253 patients of idiopathic Parkinson disease, and 246 sample population, thru this controlled process were evaluated. The polysomnography was performed in 156 patients and 64 of the control group. The informed consent forms were obtained; this research was approved by the Ethics Committee. The patients were evaluated using Sleep Questionnaire, Unified Parkinson Scale, Hoehn & Yahr Scale, Pittsburgh Sleep Quality Index (PSQI), Epworth Sleepiness Scale (ESS), Schwab England Scale, Mini Probe of Mental Status, and Scale for Evaluation of Economic In-