

THESES

THE MELATONIN ROLE IN MIGRAINE AND COMORBIDITIES (ABSTRACT)*. THESIS. SÃO PAULO, 2007.

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Purpose: To assess 6-sulphatoxymelatonin (aMT6s) levels in patients with episodic migraine, chronic migraine and controls, also evaluating the relations with migraine comorbidities, like fibromyalgia, chronic fatigue, sleep disorders, depression and anxiety.

Method: A MT6s was measured by quantitative ELISA. The headache diagnosis was established according to the diagnostic criteria of IHS and the urinary samples were collected in a 12-hour period (from 8:00 p.m. to 8:00 a.m.). The statistical analyses was performed comparing the migraine diagnosis, comorbidities and controls and aMT6s levels, and the presence of a migraine attack in the day of the urinary sample collection.

Results: A total of 268 subjects were referred to evaluation. From this total, 48 were excluded. The remaining 220 subjects were in accordance with the inclusion criteria. Among them, 73 (33%) had episodic migraine, 73 (33%) had chronic migraine and 74 (34%) were control subjects. Lower levels of aMT6s were found in patients with migraine, when compared with controls. The levels were even lower when the urinary samples were collected in concomitance with migraine crises. There was a strong inverse correlation between aMT6s concentrations and depression, anxiety and fatigue levels, excessive diurnal sleepiness and the number of fibromyalgia tender points.

Conclusion: These results support theories that corre-

late melatonin and migraine pathophysiology. The finding that migraine patients presented lower levels of melatonin, when compared with controls, it is in accordance with previous studies. The findings of even lower levels in patients with chronic migraine and during attacks are previous unreported. The levels of aMT6s also inversely

correlated with depression levels, anxiety levels, fatigue levels, excessive diurnal sleepiness and the number of fibromyalgia tender points. These relations, until this date, were also never reported.

Key words: migraine, melatonin, comorbidities.

*O papel da melatonina na enxaqueca e comorbidades (Resumo). Tese de Doutorado, Universidade Federal de São Paulo (UNIFESP) (Programa de Pós-graduação em Neurologia Clínica - Área: Ciências). Orientador: Mario Fernando Prieto Peres; co-orientador: Luiz Celso Pereira Vilanova.

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