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Case Report

The use of citalopram for the treatment of cataplexy ☆

Hassana de Almeida Fonseca[a,b], Danielle Antunes Lopes[a], Danielle Pereira[a], Danilo Anunciatto Sguillar[a], Eduardo Lopes[a], Nilce Sanny Costa da Silva Behrens[a,c], Taís Figueiredo de Araújo Lima[a], Marcia Pradella-Hallinan[a], Juliana Castro[a,*], Sergio Tufik[a], Fernando Morgadinho Santos Coelho[a,d]

[a]Outpatient Facility of Diurnal Excessive Sleepiness, Department of Psychobiology, Federal University of São Paulo, Brazil
[b]Department of General Practice, Federal University of Rio de Janeiro, Brazil
[c]Ear, Nose and Throat Clinic, Marcílio Dias Naval Hospital, Rio de Janeiro, Brazil
[d]Department of Neurology and Neurosurgery, Federal University of São Paulo, Brazil

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ABSTRACT

This is a series of cases describing the use of citalopram for the treatment of cataplexy in patients with narcolepsy. Cataplexy is the most specific symptom of narcolepsy, being characterized by a sudden and temporary loss of muscle tonus, triggered by episodes of emotion during vigil.

Some antidepressants, besides gamma-hydroxybutyrate, are used for the control of cataplexy. As gamma-hydroxybutyrate is not available in Brazil, local treatment is usually done by the use of antidepressants.

Citalopram is a selective inhibitor of serotonin reuptake, with reasonable price and with fewer side effects when compared with other drugs of the same type. In this study, we report a series of cases with patients with narcolepsy and cataplexy, treated with citalopram for the control of cataplexy.

1. Introduction

Cataplexy consists of a sudden and temporary loss of muscle tonus, triggered by an emotional stimulus. It reaches 0–70% of all patients with narcolepsy and affects the individual during vigil for some seconds to several minutes. Normally, during the attack of cataplexy, there is no loss of consciousness [1,2].

Cataplexy may affect only a specific muscle group or all skeleton muscles. Besides, the episodes are more frequent when the patients are sleepy of chronically stressed. As far as event frequency, they might vary from sporadic during the year, to several attacks during the day with important incapacitation [1,3].

In this sense, the patients with cataplexy are deprived of social situations to avoid emotions and subsequent attacks.

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*Correspondence to: Rua Marselhesa, 529, Vila Clementino, CEP 04020-060, São Paulo, SP, Brazil. Tel.: +55 11 992909799, + 55 11 59087191.
E-mail address: juvilela.castro@gmail.com (J. Castro).
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Therefore and due to this distancing of friends and familiar interactions, there is a major prevalence of humor disturbances within this population [3].

The majority of stimulant medications used for the treatment of diurnal excessive sleepiness is little effective upon cataplexy or upon other symptoms related to the REM sleep [4]. The pharmacological treatment of cataplexy in patients with narcolepsy includes gamma-hydroxybutyrate, tricyclic antidepressants, selective serotonin-reuptake inhibitors, venlafaxine or reboxetine [5].

Although gamma-hydroxybutyrate is the main drug for the treatment of cataplexy, this medication is still not available in Brazil [5]. Therefore, other options of treatment have been used locally [1]. The objective of this article is to describe our experience with the use of citalopram for the control of cataplexy in a series of patients.

2. Methods

We revised the files of 74 patients with clinical and electrophysiological diagnostic of narcolepsy, according to the criteria of the *American Academy of Sleep Medicine* (AASM), who were treated by of Outpatient Facility for Diurnal Excessive Sleepiness of the Federal University of São Paulo – Brazil [6].

All patients were treated between the years of 2008 and 2012, with an average periodicity of 4–6 visits per year. This study was approved by the Ethical Committee for Research of the Federal University of São Paulo (CEP 1802/07).

The continuous use of citalopram above six months, with the total or partial control of cataplexy, was considered as a therapeutic success after spontaneous report from the patient. We have not used questionnaires or other objective evaluation methods for cataplexy.

The proposed initial standard dosage for the control of cataplexy was that of 20 mg/day. The side effects after the use of citalopram were reported by the patients themselves and were not obtained in a systemic way.

3. Results

We evaluated 122 patients with the diagnostic of narcolepsy, from which 74 (60.7%) demonstrated cataplexy (Table 1).

Citalopram was used for the control of cataplexy in 19 (25.7%) patients. From these 15 (78.9%) patients, citalopram was the drug of first choice and in 4 (21.1%) patients, citalopram was the second or third choice for the control of cataplexy. The control of cataplexy was achieved with a dosage of 20 mg in 15 patients (78.9%) and the maximum dosage was of 60 mg/daily.

The other antidepressants utilized by the patients were fluoxetine, sertraline and amytriptilin.

At the end of this study, the average period of citalopram use was of a year and 2 months. Only one patient was precociously discontinued, with less than a month of drug treatment, due to the suspicion of weight gain associated with the medication. Other 2 patients (13.3%) reported side effects that resulted in drug substitution later on. All other patients had good control of their cataplexy symptoms.

Table 1 – Anthropometric, clinical and drug usage data of the narcoleptic patients with cataplexy.

Patients with cataplexy	74
Age (years)	30.1±11.6
Gender (male)	39 (52.7%)
Corporal Mass Index (kg/m^2)	25.44±12.64
Hypnagogic/hypnopompic hallucinations	53 (71.6%)
Presence of HLA-DQB1*0602	44 (59.5%)
Average latency of SMLT	3.47±3.19
SOREMPs	2.9±1.56

SMLT – Sleep Multiple Latencies Test; SOREMPs – quantity of REM sleep episodes during SMLT.

4. Discussion

Actually, AASM also includes selective serotonin reuptake inhibitors (SSRI) such as venlafaxine and reboxetine for the treatment of cataplexy [1,4].

The mechanism of action of antidepressants upon cataplexy is still not fully understood; however, the regulation of the cholinergic, serotonergic and adrenergic system is well researched. The SSRI act much more selectively on serotonergic receptors and do so in treating cataplexy. SSRI possess much less side effects and less pronounced side effects than the ones observed with the use of tricyclic antidepressants. However, SSRI are also less efficient in the control of cataplexy when compared with tricyclic antidepressants and to selective noradrenergic reuptake inhibitors, being necessary to increase the dosage to higher levels for the control of that symptom [1].

Although tricyclic antidepressants were the first choice of medication used for the treatment of cataplexy, their administration is limited due to their strong anticholinergic side effects, cardiac conduction disturbances, convulsive crisis, sedation and constipation [8].

The chiefly SSRI used is fluoxetine [8]. However, citalopram possess the advantage of being a more serotonin-selective inhibitor, with none or minimum effect upon other drugs. The observed side effects of citalopram are generally mild and transitory, being more frequent during the first weeks of treatment and reducing with its continuous usage in normal dosage [9].

Even though there have been advances in the understanding of narcolepsy, there are still a few options for treatment with reasonable success for cataplexy [7]. Although with certain limitations, such as the retrospective manner and the limited number of patients, this study confirms the usefulness and security of the use of Citalopram upon the control of cataplexy in patients with narcolepsy. Controlled studies must be performed to better characterize the benefits of such medications for the control of cataplexy.

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