Narcolepsy and Epilepsy comorbidity Treatment

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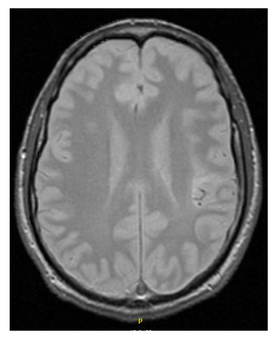
INTRODUCTION



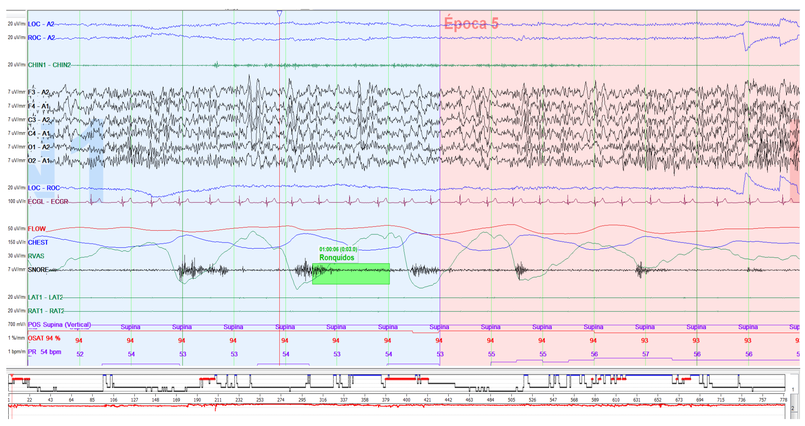
Male, 48 years old, has been under the care of the Sleep Unit since 1988 due to excessive daytime sleepiness with uncontrollable brief sleep attacks, sudden muscle tone losses triggered by emotions without loss of consciousness, sleep paralysis, and hypnagogic and hypnopompic hallucinations, diagnosed with Narcolepsy Type I. As a personal history, he was diagnosed with epilepsy at the age of 9 (focal seizures with secondary generalization) in relation to left temporal injury and started treatment with Carbamazepin at that time.

OBJECTIVES

Approach and therapeutic management of a patient diagnosed with Narcolepsy type I and Epilepsy.

MATERIAL AND METHODS

As part of the studies conducted to confirm the diagnosis, multiple sleep latency tests (1990 and 2001) were included, revealing daytime hypersomnolence with an average sleep latency of less than 2 minutes and the onset of REM sleep (SOREM), a characteristic feature of Narcolepsy. Nocturnal polysomnographies (1988, 2003, and 2016) ruled out the presence of significant sleep-related breathing disorders, with an RDI of 5 per hour of sleep. HLA analysis was also performed in 2001, with positive results for DQA1 0102 and DQB1 0602.



Treatment was initiated with Methylphenidate, one of the few drugs available at that time, resulting in mild improvement. In 2001, Methylphenidate was discontinued, and Modafinil became available. Treatment with Modafinil was started, reaching a dose of 300 mg, but excessive daytime sleepiness with uncontrollable sleep attacks, automatic behaviors, cataplexy, and fragmented nighttime sleep persisted. Additionally, new epileptic seizures were identified, leading to the discontinuation of Carbamazepin and the initiation of Lamotrigin. Epilepsy significantly limited the management of Narcolepsy, as it contraindicated the use of recent drugs indicated for this condition, such as Sodium Oxybate. For the control of cataplexy, Fluoxetine was prescribed, and later, Clomipramine, with partial control but side effects of impotence and sexual dysfunction, which necessitated discontinuation.

In 2016, the patient continued to experience significant symptoms, with a progressive worsening of symptoms over the years despite maximum doses of prescribed medications: Modafinil 400 mg, a non-benzodiazepine hypnotic, and Venlafaxine as an anti-cataplectic agent, which the patient was forced to take despite the side effects due to the intensity and frequency of cataplexy. Thus, continuous daytime hypersomnolence with sleep attacks and automatic behaviors persisted, which were highly limiting and disabling, exacerbated by maintenance insomnia, daily cataplexy, and sleep paralysis. All of this significantly limited the patient's ability to perform daily activities, including work, family, social, and leisure activities.

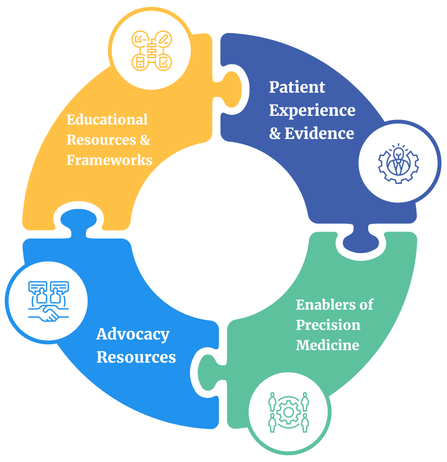
In 2022, with the availability of Pitolisant, a gradual introduction was decided upon, given the focal epilepsy, with close medical monitoring: the first week, 2 tablets of 4.5 mg (9 mg); the second week, 1 tablet of 18 mg, and in the third week and subsequent weeks, 1 tablet of 18 mg + 1 tablet of 4.5 mg (22 mg). In addition, the doses of Venlafaxine and Modafinil were partially reduced. The seizures were controlled with perampanel.

In subsequent reviews, the patient did not experience side effects with Pitolisant or epileptic seizures, so the dose was increased to the maximum: 2 tablets of 18 mg. The same doses of Modafinil and Venlafaxine were maintained, along with alternating use of a non-benzodiazepine hypnotic (Zolpidem/Zopiclone)

In 2023, the patient reported improvement in cataplexy, with reduced frequency and some of lesser intensity, allowing for a better quality of life. The patient also mentioned slight difficulty concentrating and some 'fogginess' at the end of the day, which disappeared after several weeks of treatment. There was no improvement in nighttime awakenings and sleep structure.

RESULTS AND CONCLUSIONS

New medications have had a significant impact on the quality of life of these patients, but we encounter cases like this one, where the presence of other associated comorbidities is common. It's worth noting that the therapeutic options for this patient are very limited due to the coexistence of epilepsy, restricting the use of other drugs considered first-line treatments. It is crucial to emphasize the need for research into new medications for the treatment of narcolepsy because, unlike the progress seen in other conditions such as epilepsy, we lack the means to properly manage these patients, addressing the underlying cause rather than just alleviating symptoms. In other words, it calls for a precision medicine approach.



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