Letter to the Editor

Unexpectedly high prevalence of narcolepsy in Sivas

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In a recent issue of “Tüberküloz ve Toraks Dergisi” Özdemir and coworkers reported several results from a survey including symptom prevalences of sleep-disordered breathing, insomnia and narcolepsy (1). According to their results, the prevalences of insomnia, habitual snoring, obstructive sleep apnea (OSA) and daytime hyper-somnolence in 5337 persons were 40.3%, 37.0%, 6.4%, 24.0% respectively. The prevalence rates for narcolepsy and nocturnal myoclonus were 30.6%, 40.1% respectively. These results worth to consider the questions that what is happening to people in Sivas? Does half of inhabitants sleep during the day and night?

Narcolepsy is a clinical condition characterized by classic tetrad, excessive daytime sleepiness (EDS), cataplexy, hypnagogic and hypnopompic hallucinations, and sleep paralysis. Sleep attacks are irresistible and unpredictable. These short naps are also refreshing and restorative. There is controversy concerning the criteria needed to confirm diagnosis of narcolepsy in patients with EDS. In our country, a positive history of cataplexy together with EDS is required. There have been several structured inventories and laboratory tests, such as multiple sleep latency test, designed to evaluate EDS. Genetic testing may also be helpful as 85% of all narcoleptics with cataplexy share a specific human leukocyte antigen (HLA) allele on chromosome 6, HLA DQB1*0602. It seems difficult to diagnose narcolepsy with only three positive questions as in the study of Özdemir et al. without a detailed clinical examination and adequate laboratory testing including polysomnography to exclude other causes of EDS, multiple sleep latency test to verify shortened sleep latency and to observe sleep onset REM periods, and genetic testing. Such an approach may solely cause overestimation or misinterpretation of the results.

The prevalence of narcolepsy has been investigated in many countries and/or ethnic groups. Community-based studies reported its prevalence to be 0.034% in Southern China, 0.047% in European general population, and 56.3 per 100.000 person in U.S. (2-4). These results sug-
gest narcolepsy prevalence is approximately 600-900 times higher in Sivas than rest of the world. One may easily consider that whether there is a genetic predisposition to narcolepsy in Sivas. Furthermore, one may conclude that Sivas is endemic region for narcolepsy. If this is the case then the authors should make a more detailed discussion on the reasons of high prevalence of narcolepsy in Sivas. We are very suspicious that to what extent their results are reliable and reproducible.

We suggest a correction in a future issue of “Tüberküloz ve Toraks”. The results of the article by Özdemir et al. should be re-evaluated and the persons suspected from narcolepsy should be examined to verify the diagnosis.

REFERENCES


Response

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We thank to Ozturk L and Bulut E for their remarks on our paper entitled “The prevalence of sleep related disorders in Sivas, Turkey” that was printed in Tuberculosiopia and Thorax (1,2). The remarks were evaluated by us and our responses are indicated as below;

The work was a cross sectional study and the data was based on questionnaire. The questionnaire was taken from a text book that one of the widely used questionnaire in our country (3). Our study’s title was “The prevalence of sleep related disorders in Sivas, Turkey”. So we reached not only narcolepsy but also data of several sleep related disorders by this questionnaire (3). In a way the data being comparable to the other literature supported our perspective without data of narcolepsy. As Michael et al stated in their paper “There is currently no ‘gold Standard’ for the clinical diagnosis of narcolepsy”(4). Particularly it is true that with only questionnaires diagnosis of narcolepsy can’t be made as also stated by the authors (2). In the study we underlined several times that this was a study based on questionnaire data and it would be more convenient to interpret the data in that way. With the given method we reported the questionnaire data accordingly.

REFERENCES

1. Öztürk L, Bulut E. Unexpectedly high prevalence of narcolepsy in Sivas.