Relevance of Serial Interferon-γ Release Assays in Health-care Workers

To the Editor:

We read with interest the study by Park et al in which they nicely evaluated serial interferon-γ (IFN-γ)-response, as well as conversions in IFN-γ release assay (IGRA) results among participants at 1, 2, and 5 years. Their second comment addressed another article describing the change in IGRA results among participants taking medication to treat latent TB infection. Unfortunately, the clinical meaning of such conversions is not clear, and long-term follow-up is required to answer the question.

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Response

To the Editor:

We thank Dr Aggarwal and colleagues for their interest in and valuable comments on two of our publications.1,2 Their first comment addressed the article on the high rates of conversion and reversion in monthly interferon-γ release assay (IGRA) results for health-care workers.1 They asked whether any participant with a positive IGRA subsequently developed active TB, which is an important issue. So far, none of the participants has developed active TB. We plan to screen participants for active TB at 1, 2, and 5 years. Their second comment addressed another article describing the change in IGRA results among participants taking medication to treat latent TB infection.2 They asked what is meant by negative conversion of the IGRA with treatment of latent TB infection. Unfortunately, the clinical meaning of such conversions is not clear, and long-term follow-up is required to answer the question.

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REFERENCES


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Demand for Multicentric Climatic Research to Investigate the Relationship Between Sleep Apnea and Other Disorders and Seasonality

To the Editor:

The merit of the work by Cassol and colleagues (see page 1499) is outstanding. The study performed a retrospective clinical analysis of an impressive 7,523 individuals suspected of having some type of sleep disorder over the span of 10 years. The authors aimed to examine whether a relationship between seasonality and the severity of obstructive sleep apnea (OSA) exists. Through elaborate statistical analysis, results showed an increase in the incidence of more-severe OSA in the winter compared with that in the summer. However, the authors acknowledge that the retrospective nature of the study limits the ability of the main question to be adequately addressed.

This study has great potential impact, and the authors deserve congratulations for the complexity of the research. However, it should be noted that it was performed in only one location (Porto Alegre, Brazil), and the results do not accurately represent a global climatic characteristic. An important point that defines a subtropical climate, as that of the study’s location, is the presence of four clearly defined seasons that vary greatly in temperature range. Such a wide variation of temperatures does not occur at all latitudes. As a result, a well-defined winter has a greater impact on the health of the population, causing more individuals to seek medical assistance and consequently leading to a larger number of breathing disorders. OSA has a high prevalence, reaching about 33% of a metropolitan city and demonstrating the relevance of studying relationships branching from this common disease in the contemporary world.

Another prominent factor was the high prevalence of smokers found in this sample. Conway et al also reported a similar prevalence of collectively about 37%, suggesting a strong association between sleep fragmentation and oxyhemoglobin desaturation during sleep. Thus, smoking habits, a predictive factor for breathing disorders, can be linked to an increase in the apnea-hypopnea index used to indicate sleep apnea.

The question posed in this study of whether OSA is a winter disease also raises another important question: the existence of seasonality in other types of sleep disorders. To investigate this possibility, future research is needed to elucidate this association, using the current study as a preliminary base. Seasonality in relation to sleep disorders is an innovative topic and should be investigated as a multicentric framework in regions with distinct climates to evaluate the changes in several sleep disturbances, including insomnia, movement disturbances, and sleep apnea, relative to seasonal variations.

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References


Response

To the Editor:

We thank Mr Ramos-Xavier and colleagues for their comments and knowledgeable appraisal of our work. Their disposition to engage in multicentric studies demonstrates their awareness of the relevance of the matter.

Our report on the seasonality of obstructive sleep apnea severity was performed in a humid subtropical climate, the Cfa group in the Köppen-Geiger climate classification (the Cfa group is an environment with significant precipitation in all seasons) and an average temperature of the warmest month above 22°C [a] belonging to the temperate [C] group of the Köppen-Geiger

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