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LETTERS TO THE EDITOR

Bidirectional Relationship between Obstructive Sleep Apnea (OSA) and Psoriasis: Implications for OSA Therapies?

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We read the findings of Egeberg et al. demonstrating a bidirectional association of the incidence of psoriasis and psoriatic arthritis (PsA) with obstructive sleep apnea (OSA), and *vice versa*, with great interest.¹ It is encouraging to read that the results support the findings of our systematic review² that suggested a bidirectional association of OSA and psoriasis based on several studies.

The authors discuss that the relationship between OSA and psoriasis is likely complex and mediated by underlying inflammatory pathology. This is further supported by their finding¹ of a trend for the strongest overall bidirectional association between OSA and psoriatic arthritis (versus psoriasis affecting the skin alone) where the acute inflammatory component is the strongest. It is excellent that the authors have mentioned the possible beneficial effect of CPAP in the treatment of the psoriasis patient with OSA, because of the anti-inflammatory effect of CPAP. This has been reported in cases of recalcitrant psoriasis³ in the past and requires further systematic evaluation.

In this large epidemiologic sample,¹ it would be very interesting to examine the incidence of OSA in psoriasis patients who were on biological drugs at baseline (these patients were also categorized as having severe psoriasis), and adhered to their treatment versus those who did not. In this study the authors found that greater psoriasis severity at baseline was associated with more severe OSA (Table 2). This requires further clarification as treatment with biological drugs would be expected to be associated with a lower incidence of psoriasis, due to their overall anti-inflammatory effect. However, since the patients on biologics had more severe disease at baseline, at the very least the possible confounding effect of the biological drugs on the future development of OSA should be controlled for statistically.

Overall, this study contributes excellent population-based incidence data that suggest that further studies of the treatments for OSA need to focus on the underlying inflammatory pathology, and not just the sleep-related respiratory symptoms.

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