Examining the association of sleep disturbances with older adult age in atopic dermatitis patients

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Background/objectives: Atopic dermatitis is a chronic, inflammatory skin disease associated with sleep disturbance. When caring for geriatric patients, several factors such as sleep disturbance, polypharmacy, cognition, social support, and mobility should be considered. Our study investigated the association of older adult age with atopic dermatitis severity and sleep disturbances.

Methods: This was a cross-sectional, dermatology practice-based study of adults (≥18 years) with atopic dermatitis diagnosed by Hanifin-Rajka criteria. Patients were serially recruited from the eczema clinic at an academic medical center between 2014-2019. Patients underwent full body skin exam and completed electronic questionnaires. Atopic dermatitis severity was assessed using Eczema Area and Severity Index, SCORing Atopic Dermatitis total and itch subscores, Investigator’s Global Assessment, Patient-reported Global Assessment of atopic dermatitis severity, and Patient-Oriented Eczema Measure. Frequency of sleep disturbances was assessed, including difficulty falling asleep and staying asleep.

Results: Older adult age (≥65 years) was not associated with AD severity in the following measures (adjusted odds ratio [95% confidence interval] for Eczema Area and Severity Index: 1.47 [0.68-3.18]; total SCORing Atopic Dermatitis: 1.10 [0.52-2.34] and itch subscore: 1.00 [0.55-1.81]; Investigator’s Global Assessment: 1.87 [0.98-3.56]; Patient-reported Global Assessment of atopic dermatitis severity: 0.80 [0.45-1.41]; Patient-Oriented Eczema Measure: 0.55 [0.29-1.06]). However, older adult age was associated with increased number of nights of sleep disturbance from atopic dermatitis (2.14 [1.16-3.92]). Older adult age was also associated with increased fatigue (1.81 [1.05-3.09]), trouble sleeping (1.98 [1.16-3.36]), and trouble staying asleep (2.26 [1.32-3.89]), but not with difficulty falling asleep (1.16 [0.66-2.03]) in atopic dermatitis patients.

Conclusion: While older adult patients with atopic dermatitis had similar disease severity compared to younger adults with atopic dermatitis, they had more profound sleep disturbances than younger adults, particularly trouble staying asleep.