

Association of Chronic Hand Eczema with Anxiety and Depression: A Systematic Review

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Background: Chronic Hand Eczema (CHE) was previously found to be associated with anxiety and depression. However, studies showed inconsistent results regarding the relationship between CHE and these disorders.

Objective: To determine whether CHE, particularly atopic HE, is associated with anxiety and depression, as well as predictors of such association.

Methods: A systematic review was performed of all published studies assessing the relationship between chronic hand eczema and anxiety and CHE and depression. Searches were conducted in the following databases: MEDLINE, Embase, Pubmed, PsychINFO, Scopus Latin American and Caribbean Health Sciences (LILACS) and the Cochrane Library. Study title and abstract screening, full text screening and data extraction were conducted by at least two independent reviewers.

Results: In total, 24 observational studies and 1 clinical trial met the inclusion criteria. Studies examined the relationship between CHE and anxiety symptoms (n=7), depression (n=6, including depressive disorder [n=1] and symptoms [n=6]), anxiety and/or depression (n=3), stress (n=6) and obsessive-compulsive disorder (n=2). There was considerable heterogeneity of study designs, as well as definitions used to identify and/or determine severity of anxiety and depression. The majority of studies were conducted in Europe (76%). CHE was diagnosed by a physician in 15 studies (60%) or self-report in 10 studies (40%). Three studies examined mean depression scores in patients with CHE. The pooled random-effects mean [95% CI] BDI score was 11.2 [6.6-15.9], indicating mild depression overall. Six out of 7 studies (85.7%) found an association between CHE and anxiety symptoms. Four out of 6 studies (66.7%) found association between CHE and stress. Five out of 6 studies (83.3%) reported an association between CHE and depression. Only 5 out of 24 studies (20.8%) reported rates of comorbid AD. No studies examined specifically examined atopic HE. The clinical trial reported higher rates of depressive symptoms as an adverse-event of alitretinoin treatment for CHE compared with rates observed in past studies.

Conclusions: Together, the results support an association of CHE with depression, symptoms of anxiety and stress. These mental health symptoms and/or disorders likely have a detrimental impact on the overall health and quality of life of patients with CHE. Future studies are needed to determine the impact of CHE treatment on these mental health symptoms and comorbidities.