



ATOPIC ECZEMA/DERMATITIS

NAIL MANIFESTATIONS IN ATOPIC DERMATITIS: A SYSTEMATIC REVIEW

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Background: The spectrum of nail disorders that result from underlying atopic dermatitis (AD) are wide and have been reported in several studies worldwide, but there has been no systematic review so far.

Objective: To determine the prevalence and type of nail disorders seen in atopic dermatitis, either as a complication of the underlying condition, or as a clue to early diagnosis.

Methods: The authors performed a systematic review of English and non-English articles using MEDLINE, EMBASE and Cochrane which reported the proportion of nail changes among AD patients. Only studies specifically looking at atopic dermatitis and its associated nail manifestations were included. Data were extracted and summarized descriptively. Twelve studies met our inclusion criteria.

Results: Twelve studies reported proportion of nail changes among AD patients. One study reported numbers in both adults and children cohorts, allowing 13 cohorts for final meta-analysis. The results from this systematic review reveal that there is a significant association between nail manifestations and atopic dermatitis. According to the Forest plot, as shown in Figure 3, there is a significant proportion with an effect size at 11.0% (95% CI 9.0-14.0%) of individuals who suffer from nail changes while having atopic dermatitis. This is consistent with the majority of our included studies (58.3%), where the 95% confidence interval overlaps at 11.0%. This emphasizes that nail changes are prevalent in atopic dermatitis, which is not a common association that comes readily to a physician's mind.

Conclusions: This review provides support for clinicians to examine the nails more closely in patients suffering from atopic dermatitis. Knowledge of the differential diagnoses resulting in onychopathies, either as a sole manifestation or as a constellation of signs resulting from the primary dermatological condition, is important in establishing the correct diagnosis.

