



ATOPIC ECZEMA/DERMATITIS

ASSOCIATION OF ATOPIC DERMATITIS WITH INFLAMMATORY BOWEL DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction: Altered microbiota of the skin and the gastrointestinal tract have been recently linked to changes in immune mechanisms and to the development of chronic inflammatory skin diseases, such as atopic dermatitis (AD). However, the relationship between AD and inflammatory bowel disease (IBD) remains unclear.

Objective: To evaluate the association of AD with IBD.

Materials and Methods: We conducted a systematic review and meta-analysis of observational studies on the association of AD with IBD. We searched MEDLINE and Embase for all relevant studies published up to August 31, 2018. Data were extracted independently by two reviewers. We analyzed Crohn disease (CD) and ulcerative colitis (UC) separately by conducting random-effects model meta-analyses. The outcomes were the odds and risk of CD and UC in subjects with AD.

Results: We included 4 case-control studies and 2 cohort studies. As to case-control studies, we identified significant associations of AD with prevalent CD (odds ratio (OR) 1.55, 95% confidence interval (CI) 1.11-2.15) and UC (OR 2.49, 95% CI 1.04-5.98). One German cohort reported increased risk of incident CD (risk ratio (RR) 1.34, 95% CI 1.11-1.61) and UC (RR 1.25, 95% CI 1.03-1.53) in patients with AD. By contrast, another Danish cohort study illustrated adjusted overall hazard ratio of 0.69 (95% CI 0.34 – 1.30) for incident CD and 0.94 (95% CI 0.61 – 1.43) for incident UC in patients with AD.

Conclusions: We found significant associations of AD with prevalent IBD. However, the risk of incident IBD in AD individuals remains obscure due to the inconsistent results from different cohort studies. More epidemiological studies are warranted to clarify the risk of IBD in patients with AD.

