



ATOPIC ECZEMA/DERMATITIS

ASSOCIATION BETWEEN ATOPIC DERMATITIS AND BONE MINERAL DENSITY: A META-ANALYSIS

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Introduction: Patients with atopic dermatitis (AD) have risk factors for risk of low bone mineral density (BMD) because of chronic inflammation and use of corticosteroids.

Objective: To evaluate the BMD in AD patients and controls, as well as the effects of topical corticosteroid treatment on BMD.

Method: We searched CENTRAL, EMBASE, and MEDLINE from inception to June 2nd, 2018 for case-control studies reporting on the BMD in patients with AD. Random-effects model meta-analysis was used to calculate the pooled odds ratio (OR) and 95% confidence interval (CI) of low BMD; each study was weighed by the inverse effect size variance.

Results: We included seven studies that met the inclusion criteria. Patients with AD did not have lower BMD of the lumbar spine (OR = 1.15, 95% CI 0.82 to 1.60, I² = 45%) or of the femur (OR = 1.04, 95% CI 0.80 to 1.37, I² = 0%) compared to controls. No significant differences in BMD were found between AD patients using different dosages of topical corticosteroids.

Conclusion: The best evidence does not support an association between AD low BMD. Patients with AD and their family can be reassured that no increased risk of low BMD has been observed in patients on topical steroid treatment.

