

PSORIASIS

## ASSOCIATION OF MULTIPLE SCLEROSIS WITH PSORIASIS: A SYSTEMATIC REVIEW AND META-ANALYSIS OF OBSERVATIONAL STUDIES

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**Background:** Previous studies have found multiple sclerosis and psoriasis may share similar predisposing genes and mechanisms.

**Objective:** We aimed to investigate the association between psoriasis and multiple sclerosis.

**Materials and methods:** We searched MEDLINE, EMBASE, and CENTRAL in June 2017 for case-control, cross-sectional, or cohort studies that examined either the odds or risk of psoriasis in subjects with multiple sclerosis. The risk of bias of included studies was assessed by using the Newcastle-Ottawa Scale. The random-effects model meta-analysis was used to calculate the odds ratio (OR) for case-control/cross-sectional studies and hazard ratio (HR) for cohort studies.

**Results:** We included 8 case-control/cross-sectional (5 case-control and 3 cross-sectional studies) and 2 cohort studies with 546,758 study subjects. Three studies were rated with a high risk of bias in comparability, non-response rate, and selection of controls, respectively. Multiple sclerosis was associated with increased odds (OR 1.43; 95% confidence interval (CI) 1.12-1.83) and risk for psoriasis (HR 1.92; 95% CI 1.32-2.80).

**Conclusions:** Patients with multiple sclerosis are prone to have psoriasis.