



PIGMENTATION

## STUDY OF THE CUTANEOUS EXPRESSION OF THYMIC STROMAL LYMPHOPOIETIN (TSLP) IN VITILIGO PATIENTS: A CASE-CONTROL STUDY

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**Introduction:** Thymic stromal lymphopoietin (TSLP) is a major pro-allergic cytokine promoting T helper-2 responses. Some studies have assumed a strong relationship between TSLP expression in skin keratinocytes as well as airway epithelial cells and the role of TSLP in the pathogenesis of atopic dermatitis and asthma, respectively.

**Objective:** Our objective was to study and verify the hypothesis of the role of TSLP in the pathogenesis of vitiligo.

**Materials and Methods:** This case-control study was conducted on twenty-five patients with generalized non-segmental vitiligo (recruited from the Dermatology outpatient clinic, Kasr Al Ainy, Faculty of Medicine, Cairo University), and twenty-five healthy controls fulfilling the inclusion criteria over a period of 7 months (January 2017 - July 2017). Patients were subjected to complete medical history, detailed assessment of vitiligo and photography taking. Skin biopsies were taken from the back from both patients' vitiliginous skin and from normal skin of controls for which relative TSLP mRNA tissue expression levels were measured using quantitative real-time polymerase chain reaction technique.

**Results:** There was a statistically significant difference between the TSLP mRNA expression levels in patients and controls ( $P < 0.001$ ) with lower levels in the former group.

**Conclusion:** This study revealed lower TSLP mRNA expression levels in vitiliginous skin than in normal skin suggesting an imminent role of TSLP in the pathogenesis of vitiligo.

