Evaluation of autologous serum skin test and skin prick test reactivity to house dust mite in patients with chronic spontaneous urticaria.

Abstract:
Chronic spontaneous urticaria (CSU) is a common skin disorder with etiology that is not well understood. In this study, we evaluated the prevalence of autologous serum skin test (ASST) and skin prick testing (SPT) to house dust mite (HDM) in 862 CSU cases in China. Clinical features, courses and treatment responses were also recorded. The prevalence of positive ASST was 46.3%, and patients aged 30-39 years had the highest positive rate (52.1%). Positive SPT to HDM was seen in 153 patients (17.7%) with the highest positive rate (34.2%) in patients aged 20 or less. Patients with positive ASST had higher urticaria activity scores (UAS) (4.18±0.65 vs. 3.67±0.53) but lower positive rates of HDM (24.6% vs. 37.6%), as compared with those with negative ASST (odds ratio (OR) 1.84, 95% CI 1.38-2.47). Patients could be categorized into four groups based on the results of ASST and SPT to HDM and patients with positive ASST and positive SPT to HDM had the highest disease activity scores, experienced higher frequencies of angioedema, diseases duration, and required higher dosage of loratadine every month, compared with other subgroups (P<0.0001). Patients with CSU showed varied responses of positive ASST and varied sensitivity to HDM. Patients with positive ASST and/or positive SPT had more disease activity compared with patients with negative ASST and/or negative SPT.
Further classification can be made based on the result of SPT and ASST.