
Frequency of autoimmune thyroid disease in chronic urticaria

Reham Mahamoud Mohamed El Kashlan

Urticaria (hives) is a common disorder. Though no age is bar for urticaria and/or angioedema, urticaria is seen most commonly after adolescence. The highest incidence of urticaria is seen in young adults. Women are twice commonly affected compared to men. Urticaria is characterized by short-lived swelling of skin and mucosa due to plasma leakage. Episodes of urticaria / angioedema persisting beyond 6 weeks are considered chronic. Today, we know that up to 50% of chronic urticaria (CU) may be autoimmune. An autoimmune origin identified by the presence in their serum auto antibodies (IgE) to the alpha subunit of the high affinity IgE receptors (FceRI) or less commonly, anti immunoglobulin E (anti-IgE) capable of releasing histamine from mast cells and basophils through direct action on the alpha subunit of receptor. The first suggestion that patients with chronic urticaria and angio-oedema might have an autoimmune diathesis was the observation that there is an increased incidence of antithyroid antibodies in such patients relative to the incidence in the population at large. These include anti microsomal (Peroxidase) and anti Thyroglobulin antibodies, as seen in patients with Hashimoto's thyroiditis. The association of chronic urticaria with thyroid autoimmunity has been known since 1983, but its frequency seems to vary in different reports. The aim of study to determine the frequency of autoimmune thyroid disease in diagnosed cases of chronic urticaria and the association between hypothyroidism and chronic urticaria. The study included 40 chronic urticaria patients and 10 control subjects. The patients were 32 females and 8 males. , Patients were selected randomly of different ages and sexes and their ages ranged from 8- 60 years. The duration of the disease ranged from 6 weeks to 10 years. All studied individuals were subjected to history taking, dermatological examination, laboratory investigations which included measurement of serum TSH, free T3, free T4, anti -TPO and anti -TG levels. The result of this work showed the following: The frequency of autoimmune thyroid disease in chronic urticaria patients group 18 cases (45%) from total 40 patients compared by control group 0 cases (0.0%) of total 10 cases. 13 patients (32.5%) diagnosed as having hypothyroidism and 5 patients (12.5) had hyperthyroidism, all of them had elevated levels of serum thyroid autoantibodies. While 22 patients (55%) were euthyroid without thyroid autoantibodies in their serum. No statistically significant difference was found in the age and sex of patients group with chronic urticaria as compared to the controls group. There was significant difference was found between the same groups with

thyroid function tests immunological; anti-TPO, anti-TG) the difference was highly significant and biochemical; the difference was significant between patients group and controls group in (T3, TSH, and free T4) in both of hyperthyroid and hypothyroid cases while, TSH was insignificantly difference in comparison between hyperthyroid cases of patients group and controls group. There was association between autoimmune thyroiditis and chronic urticaria characteristics such as duration of disease and frequency of flare of cases with chronic urticaria, duration in these patients was significantly longer than in the other patients and more frequency of flare than in other patients who had negative autoantibodies and normal thyroid function while, anti-TPO was not significant association with frequency of flare of chronic urticaria. The most patients with chronic urticaria associated with symptoms were mild itching, systemic symptoms were heat intolerance, nervousness and fatigue, they were >50 of body surface area affected by >10 wheals lesion of urticaria which was medium size. The disease of chronic urticaria not associated with diurnal or seasonal variation, the most common associated sign of thyroid dysfunction were xerotic skin and non pitting oedema. The most precipitating factors of disease were heat, stress and exercise. Conclusion The study revealed the frequency of autoimmune thyroid disease in patients with chronic urticaria 45% of cases group compared with 0.0% of control group, also there was significant association between autoimmune thyroid disease (Hashimoto's thyroiditis) and chronic urticaria characteristics such as duration of disease in patients group (which was found to be longer than in the other patients) and frequency of flare of disease were significant statistical association with thyroid antibodies and thyroid hormone profile while anti-TPO antibodies was not significant statistical association with frequency of flare. Patients with chronic urticaria especially which have positive antithyroid antibodies are more prone to have Hashimoto's thyroiditis (hypothyroidism) more than hyperthyroidism.