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Betimi i Hipokratit

Në çastin kur po hy në radhët e anëtarëve të profesionit mjekësor premtoj solemnisht se jetën time do ta vë në shërbim të humanitetit. Ndaj mësuesve do ta ruaj mirënjohjen dhe respektin e duhur. Profesionin tim do ta ushtroj me ndërgjegje e me dinjitet. Shëndeti i pacientit tim do të jetë brenga ime më e madhe. Do t'i respektoj e do t'i ruaj fshehtësitë e atij që do të më rrëfehet. Do ta ruaj me të gjitha forcat e mia nderin e traditës fisnike të profesionit të mjekësisë.

Kolegët e mi do t'i konsideroj si vëllezër të mi.

Në ushtrimin e profesionit ndaj të sëmurit tek unë nuk do të ndikojë përkatësia e besimit, e nacionalitetit, e racës, e politikës, apo përkatësia klasore. Që nga fillimi do ta ruaj jetën e njeriut në mënyrë apsolute. As në kushtet e kërcënimit nuk do të lejoj të keqpërdoren njohuritë e mia mjekësore që do të ishin në kundërshtim me ligjet e humanitetit. Këtë premtim po e jap në mënyrë solemne e të lirë, duke u mbështetur në nderin tim personal.

The Oath of Hippocrates

Upon having conferred on me the high calling of physician and entering medical practice, I do solemnly pledge myself to consecrate my life to the service of humanity. I will give my teachers the respect and gratitude which is their due. I will practice my profession with conscience and dignity. The health of my patient will be my first consideration. I will respect the secrets which are confided in me, even after the patient has died. I will maintain by all the means in my power, the honor and the noble traditions of the medical profession.

My colleagues will be my brothers.

I will not permit considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patient. I will maintain the utmost respect for human life from its beginning even under threat and I will not use my medical knowledge contrary to the laws of humanity. I make these promises solemnly, freely and upon my honor

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IMPROVEMENT OF CHRONIC SPONTANEOUS URTICARIA WITH LEVOTHIROXINE AND AUTOHEMOTHERAPY (A CASE REPORT)

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ABSTRACT

Chronic spontaneous urticaria (CSU) is a mast cell-driven skin disease characterized by recurrence of transient wheals, angioedema, or both, for more than 6 weeks.Patients with chronic spontaneous urticaria (CSU) are widely held to often have other autoimmune disorders, including autoimmune thyroid disease.CSU can improve in response to treatment with levothyroxine or other thyroid drugs. Some studies revealed that autologous serum skin test (ASST)-positive CSU patients may especially benefit from autohemotherapy; however, the mechanisms of action remain unknown. We presented a case of a patient suffering from CSU with angioedema, positive ASST test and a newly diagnosed Hashimoto's thyroiditis in which levothyroxine in combination with autohemotherapy completely resolved the symptoms of urticaria. Laboratory investigations showed a high thyroid stimulating hormone (TSH) level and a normal free thyroxine (T4) level. She had elevated levels of antithyroid peroxidase (anti-TPO) andraised levels of free thyroxine (T3) , Thyroid peroxidase antibody test (Anti TPO). She was diagnosed as a case of Hashimoto's thyroiditis and started on levothyroxine therapy and autohemotherapy. She noticed that her uncontrolled recurrent urticaria started to get better and after a few months of therapy, she stopped taking her topical ointments and antihistamines.

Keywords: Autoimmune thyroid disease, chronic spontaneous urticaria, Hashimoto thyroiditis, Autohemotherapy

BACKGROUND

Urticaria is defined as the sudden appearance of erythematous, itchy wheals of various sizes, with or without angioedema (AE) (swelling of the deeper layers of the skin), that disappear without any trace in less than 24 hours [1]Urticaria is classified depending on time course of symptoms and the presence of eliciting physical triggers. When the symptoms last for less than 6 weeks it is classified as acute urticaria (AU), while chronic urticaria (CU) is the occurrence of symptoms for more than 6 weeks[2].According to its etiology, CU is classified as inducible chronic urticaria (ICU) and chronic spontaneous urticaria (CSU) [3]. Immunological mechanisms (autoreactivity or autoimmunity) have been proposed as major elicitors of mast cell and basophil degranulation in patients with CU [4].The relationship between CSU and autoimmune diseases was reported for the first time by Ravitch in 1907 [5]. Hashimoto's thyroiditis (HT) is an autoimmune disease characterized by inflammation of the thyroid gland, follicular destruction, and subsequent hypothyroidism [6].Autoimmune thyroid disease (ATD) and CSU have some

immunological mechanisms in common, associated with dysregulation of the immune system, an increase in IL-6 serum levels [7], reduction in the number and function of Treg lymphocytes, and an increase in Th17 lymphocytes [6]. In patients with suspicion of autoimmunity, complementary tests can be performed includingASST [8]. The ASST is considered a practical method that allows the detection of mast cell-activating serum factors and supports the association between CSU and ATD and can be related to the duration and severity of the disease [2]. In CSU patients with autoimmune diseases, in addition to removing trigger factors when possible, the use of antihistamines in high doses, omalizumab, and cyclosporine are effective in 45% of cases [9]. Several studies suggest that adequate therapy with antithyroid drugs or levothyroxine in early stages may help to achieve remission of CSU [10].The injection of autologous whole blood or serum, known as autohemotherapy, was a standard dermatologic treatment in the early 1900s [11]. Several investigators have evaluated autohemotherapy as a treatment for urticaria and eczema [11].Some studies revealed that notably autologous serum skin test (ASST) positive CSU patients may benefit from autohemotherapy and suggest that the immunological effects of autologous serum therapy include a reduction in IgE anti IL24 autoantibodies [12].

CASE PRESENTATION

A 39- year-old female with no past medical history and uncontrolled spontaneous urticariawith angioedema Quincke (picture 1, picture 2, picture 3) and raucous voice presented to the Dermatology department in the Hospital clinic. She has been complaining of symptoms in the past 3 months.She denied smoking and alcohol intake. She denied any sensitivity to known allergens. She was reporting acute stress episode before the beginning of the symptoms. Review of her medical record shoed that her vitals were in normal range, with blood pressure ranging from 135/73 mmHg, pulse rate 72/min, and weight 73 kg. She was prescribed second-generation non-sedating antihistamines (NSAH) at usual doses and avoiding symptom triggers. Since there was no therapeutic answer, recommended dose of non-sedating antihistamines was increased up to 4 times. Still, the therapeutic response was with mild or practically nonexistent.

Picture 1

Picture 2

Picture 3

Further investigations were performed in accordance with protocol. Laboratory investigations showed raised thyroid stimulating hormone (TSH levels) as 7.09 lU/ml (0.4-4.0 lU/ml), and normal level of free thyroxine (FT4) as 1.12 (0.89-1.76 ng/dl), raised level of triiodothyronine (T3) as 6.2 pg/ml (2.3-4.2 pg/ml), Thyroid peroxidase antibody test (Anti TPO) higher then> 1300U/ml (< 60 U/ml) .Lymphocytic count was low 13.4 (15.0-50), CRP count was raised 12.5 (0-10), D-dimer was raised 1500 (0-100 mg/L), total IgE was raised 154 IU/Ml (0-100), Iron count level was low 4.9 umol/L, Helicobacter Pylori count normal range 0.580 (0.40-1.10). Urine with normal parameters.

During the investigative process other procedures were undertaken:

- Thyroid ultrasound presented withnormal right lobus volume (v 5,9 VI), Normal left lobus volume (v 4,0 VI) and hypoechogenic parenchymal echo pattern.
- Autologous skin serum test (ASST) positive (+)
- Prick food and inhalatory allergy testing negative (-) for all standard series.

Based on investigations, a specialist in Endocrinology was consulted. The patient was diagnosed as a case of Hashimoto's thyroiditis. She was prescribed levothyroxine therapy 25 mcg, daily.

Considering the positive ASST, we started autohemotherapy in ourdepartment. The therapy scheme was as follows: 3ml autologous whole blood was injected in to the gluteal muscle in a duration of 7 days, followed by 5mlautologous whole blood muscular injection in the course ofthe next 7 days. As a maintenance therapy the patient was receiving 5 ml intramuscular autologous serum injection once a week for 8weeks.

She noticed that her uncontrolled recurrent urticarial started to get better and after six months of levothyroxine therapy and autohemotherapy the level of TSH was 1.69 mlU/ml and T4 level was 1.12, T3 level was 3.20 mlU/ml. After 10 weeks, the ASST control test was negative (-). She stopped taking systemic antihistaminic therapy that she was using for treatment of urticaria and she has been symptom-free for the past 6 months.

DISCUSSION

In the past 20 years a lot of studies have reported the connection between CSU and autoimmune thyroiditis. Patricia María O Farrill-Romanillos et al. [13]analyzedthe clinical characteristics of 127 patients with CSU. Women accounted for 78%. The average age was 44.5 ± 15.1 years. Impairments of the thyroid function were identified in 50 patients (39%), and subclinical hypothyroidism (SH) occurred in 41 (82%) of them; patients with hyperthyroidism were not found.

Gonzalez-Diaz SN et al. [14]have found that the association between CSU and ATD is more common in adult women, ranging from 4.3% to 57.4%. In the approach of both diseases, the ASST allows initially to detect an underlying autoimmune mechanism or the presence of AAbs, and a probable association between them. ASST may be considered in the first steps of the diagnostic process, and then it would be adequate to perform the investigation of specific antibodies.

Košec Aet al. [15]focused on the link between chronic urticaria and accompanying thyroid disease. They have presented a 35-year-old female patient with chronic idiopathic urticaria and facial angioedema for 9 months prior to evaluation.After considering all of the available treatment options, the patient decided to undergo total thyroidectomy. Urticaria and angioedema subsided on the third postoperative day, and she remained free of symptom recurrence during 10 months of postoperative follow-up.

Anderson, M et al. [16],reported that two of the 10 patients with Hashimoto's thyroiditis showed improved urticaria after treatment with levothyroxine.

Furteher more L. Yu et al. [12] reported that autologous serum therapy resulted in a substantial improvement in

disease activity and quality of life in CSU after 8 and 20 weeks. Twenty-eight percent and 34% of patients turned ASST-negative in weeks 9 and 21, respectively, but there was no link between their response to treatment and changes of ASST results.

Devon Brewer [11]conducted a systematic review of the literature on autohemotherapy, focusing on treatment outcomes.Overall, autohemotherapy tends to be somewhat more effective in reducing symptoms than control therapy across studies, although the advantage is not statistically reliable. Urticaria patients who test positive on the autologous serum skin test display a moderately better response to autohemotherapy than patients who test negative. Based on the limited evidence available, autologous whole blood and autologous serum injections appear to have similar effectiveness.

Still the link between chronic urticaria and accompanying thyroid disease is not understood, with current treatment focusing on antihistamines and levothyroxine [15]. Furthermore, the severity of symptoms prior to treatment is not consistently related to patients' apparent response to autohemotherapy [11]. Therefore,more randomized trials are required to find the effectiveness of autohemotherapy and levothyroxine for CSU. [11,15]

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