



# Urticaria in a 12-Year-Old Female Patient Undergoing Traditional Cautery Therapy: Case Report

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## ABSTRACT

Urticaria (Hives) is a common skin disease which can affect patients' quality of life negatively because of widespread involvement of the body and occasionally a chronic course. In recent years, the popularity of complementary and alternative therapies (TAT) has been increasing in chronic diseases. TAT practices are also increasing in the treatment of allergic/immunologic diseases. Some of these treatments have harmful consequences for patients. In this article, we report a chronic urticaria patient who received traditional cautery therapy implemented with a hot needle and emphasize the harmful effects that alternative treatment methods may cause from time to time.

**Key words:** Alternative therapy, child, urticaria

## INTRODUCTION

Chronic spontaneous urticaria (CSU) is a mast cell-mediated disease characterized by skin eruption, angioedema, or both, for more than six weeks, caused by known or unknown causes (1).

In chronic urticaria, plaques typically stay for 6-8 hours, resolve before 24 hours, and disappear without any permanent skin changes. Chronic urticaria is seen less frequently in children than in adults and affects about 0.1-3% of children (2).

Complementary and alternative therapy (CAT) is a group of various medical and health systems, practices and products that are not considered part of conventional medicine but are sometimes used instead of conventional medicine. CAT is popular as an approach for healthy living and in some chronic conditions. The implementation of complementary and alternative therapies is also increasing in the treatment of allergic/immunologic diseases. Some of these treatments have harmful consequences for patients. Here, we present a chronic urticaria patient who received

a traditional cautery therapy implemented with a hot needle and emphasize the harmful effects that alternative treatment methods may cause from time to time.

## CASE REPORT

A 12-year-old female patient presented to our outpatient clinic with the complaint of skin rashes fading with pressure and covering the entire surface of the body for the last two years. We learned from her history that these rashes appeared especially at night, had a changing location throughout the day, and regressed after a bath. Previously, she had dietary restriction for additives and was administered anti-histaminic drug therapy. The patient stated that she had benefited from the anti-histamines; however, these medications did not prevent the exacerbations later on. She had used cetirizine (morning) and hydroxyzine (evening) for three months. The patient did not describe any medication, nutritional and physical factors (symptomatic dermographism, cold urticaria, delayed pressure hives, solar urticaria, hot urticaria, vibratory angioedema, cholinergic urticaria, contact urticaria, aquagenic urticaria) as triggers.

In her past medical history, we learned that she was a full-term baby born by spontaneous vaginal delivery, with a birth weight of 2000 grams. She had not been monitored in an incubator. She had been hospitalized twice for viral hepatitis and stove poisoning. She had no accompanying allergic disease and there was no familial atopy in her family history.

Her systemic examination was normal. In her dermatologic examination, two elevated, pruritic rashes, with a size of 20x10 cm, and 7x8 cm, respectively, and fading with pressure were seen on her trunk and forearm (Figure 1). Scars of traditional cautery therapy were seen on both her arms. At the suggestion of her family's neighbors, traditional cautery therapy had been performed with a hot quilting needle (Figure 2).

Results of the laboratory tests to investigate the urticaria etiology were normal other than a positive ANA result (Table I). No rheumatologic pathology was considered in this patient since she had no additional finding.

The patient was administered second-generation antihistamine treatment and called for a follow-up evaluation 2 weeks later. The plan was to first increase the antihistamine dose four times in case of continuation of her complaints in follow-up examinations. Secondly, in

case of persistence of the symptoms for 1 to 4 weeks, it was planned to choose one of the montelukast, omalizumab, and cyclosporine treatment modalities. Systemic steroid treatment was planned for 3-7 days (max. 10 days) for acute exacerbations.

### DISCUSSION

Complementary and Alternative Medicines (CAMs) are defined by the U.S. National Center for Complementary and Integrative Health (NCCIH) as: "a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine (3-5)". The use of CAMs is increasing in patients with chronic diseases. It has been reported that patients with dermatologic complaints often prefer to use herbal therapies as part of CAMs (6-9). It has been also reported in the literature that, for some dermatological diseases, the following approaches have been implemented: Homeopathy, Acupuncture, Massage, Special Diet, Yoga, and Meditation/Hypnosis (10).

It was shown in a study investigating the implementation of CAMs that there is a positive correlation between the length and the severity of a disease and the frequency of CAM methods use.



**Figure 1.** Urticaria plates in the abdominal region, elevated from the skin and fading with pressure.



**Figure 2.** Linear scar lesions of the internal surface of the left arm that developed after cautery therapy with a hot needle. The patient had applied during the recovery phase of the lesions.

**Table I. Laboratory tests for urticaria etiology**

UNIT	PARAMETER	UNIT	PARAMETER
✓ Hemogram	Hb:12.6 g/dL wbc:6940/mm <sup>3</sup> plt:259000/mm <sup>3</sup> eos:240/mm <sup>3</sup>	✓ Parasite in stool	Negative
✓ Biochemistry	urea:20 mg/dl crea:0.4mg/dL ast:21 U/L alt:13 U/L	✓ C3	1.03 g/L
✓ Urinalysis	Normal	✓ C4	0.21 g/L
✓ Urine culture	No growth	✓ C-ANCA	Negative
✓ Throat culture	Klebsiella pneumoniae	✓ T4	0.99 ng/dL
✓ CRP	0.94 mg/L	✓ TSH	1.76 mUL/mL
✓ Hepatitis serology	Negative	✓ Sedimentation	11 mm/h
✓ IgE	131 IU/mL	✓ Anti-thyroid peroxidase	3.7 IU/ml (N)
✓ Children's mixture of 5 types food, snack mixture *, DF*, sesame sp IgE	Negative	✓ ANA	Positive
✓ SPT	Negative	✓ p-ANCA	Negative
		✓ Anti-ds DNA	Negative

\*Children's mixture of 5 types of food: egg white, milk, morino fish, wheat flour, groundnut, soybeans

\*Snack food mixture: groundnut, nuts, Brazilian walnut, almond, coconut

\*DF: Dermatogoides farinea

Chen and Chang (6) have reported that patients who are members of social groups or associations use CAMs more often. This leads to the suggestion that they are affected by their social environment in their approach to CAM methods. The approach of our patient to traditional cautery therapy under the influence of her social environment supports this suggestion.

It has been mentioned in the literature that CAM methods are not always innocent, and can sometimes even result in serious harmful effects and life-threatening injuries to the patients (11,12). It has been suggested that one of the most dangerous side effect of CAM methods is the discontinuation of the existing conventional therapy.

TAT practices are also increasing in the treatment of allergic/immunologic diseases. In 2009, the Complementary and Alternative Practices Committee of the Academy of Allergy, Asthma and Immunology (AAAAI) reported the results of a national survey of allergy specialists. This questionnaire focused on the academicians' attitudes towards TAT. It was revealed that 80% of the respondents wanted to learn more about TAT (13).

In a survey conducted by academicians in 2016, it was found that the patients used herbal medicines (67.6%), vitamins (61.9%), probiotics (57.7%), fish oil / omega-3 (57.7%) or Echinacea (38.0%) and most of them also used acupuncture (57.1%), yoga (52.1%), praying (48.6%),

meditation (41.4%), relaxation (39.7%), deep breathing (33.3%), massage (48.5%) and spinal manipulation (42.8%) (14). Regarding motivations for TAT, 89.9% expressed their desire to use natural products, 75.4% stated that they received recommendations from the family or media, 62.3% were afraid of conventional therapy, and 58% believed that TAT would be safer. The most common indications for TAT use were reported as allergic rhinitis (76.8%), general health and wellbeing (71.0%), asthma (60.9%), eczema (58.0%), food allergy (53.6%) and allergic prevention (42.0%) (15).

In addition to the alternative treatment applications in the literature, it is known that cautery therapy continues to be used in various diseases in Turkish culture as in the past.

The cautery method for the treatment of diseases has mostly been used in Turkish communities after the Göktürk period. This method was applied in the Seljuk and Ottoman periods and has reached the present day in cultural continuity (16).

## CONCLUSION

TAT practices are increasing in the treatment of allergic/immunologic diseases. The frequency varies according to the cultural, economic, sociological and medical state of the societies. Some of the alternative medicine methods

used for the treatment of allergic skin diseases may cause both dermatological and systemic side effects. Doctors should ask their patients who present with an allergic skin disease, and especially those patients who are not willing to provide information on this issue, whether they are using any kind of alternative medicine methods. Patients must be warned about the side effects and risks of these treatment modalities. Regarding patients with chronic dermatologic disease, we believe that providing them with detailed information about their disease, being in close contact with them, and, if necessary, providing psychological support during this period is very important in preventing/reducing their use of CAM methods.

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