

Chronic Spontaneous Urticaria and Thyroid Autoimmunity

Mohamed El Amraoui^{1*}, Wydad Boudi¹, Salma Baraz¹, Rachid Frikh¹, Naoufal Hjira¹¹Department of Dermatology, Mohammed V Military Instruction Hospital, Mohammed V University, RabatDOI: <https://doi.org/10.36347/sjmcr.2026.v14i10.010>

| Received: 11.08.2026 | Accepted: 02.10.2026 | Published: 07.10.2026

*Corresponding author: Mohamed El Amraoui

Department of Dermatology, Mohammed V Military Instruction Hospital, Mohammed V University, Rabat

Abstract

Case Report

Chronic spontaneous urticaria (CSU) is a frequent and debilitating immuno-allergic dermatosis, which often constitutes a therapeutic challenge. Its association with autoimmunity, particularly thyroid autoimmunity, is frequent and must be actively investigated. We report a case of chronic urticaria in a female patient with autoimmune thyroiditis and vitiligo.

Keywords: Chronic spontaneous urticaria, autoimmunity, thyroiditis, vitiligo.

Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

The association between chronic spontaneous urticaria and thyroid autoimmunity has been described since 1983. The discovery of an autoimmune component has revolutionized urticaria from a purely allergological pathology into an entity at the crossroads of dermatology, internal medicine, and endocrinology [1,2].

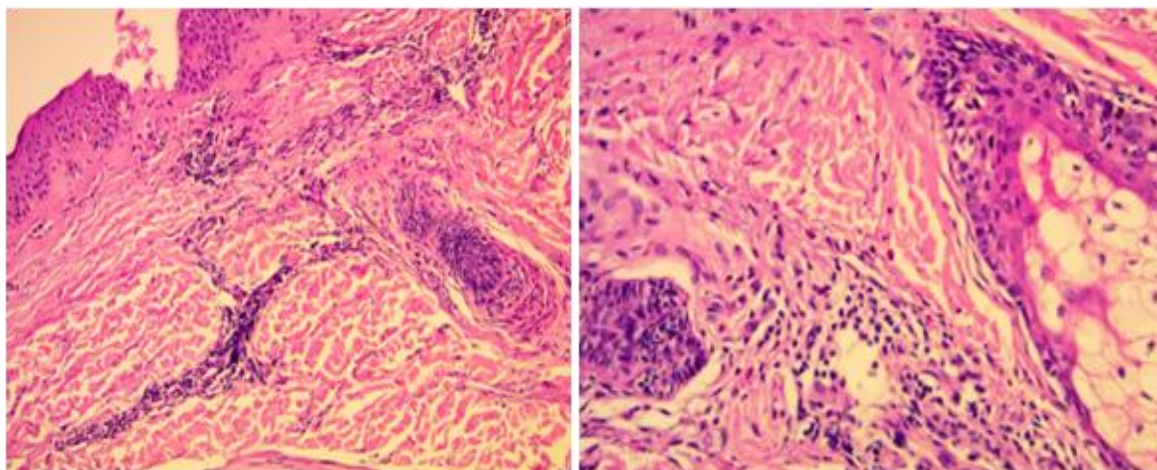
CASE REPORT

A 62-year-old female patient, with a medical history of Hashimoto's autoimmune thyroiditis managed with hormone replacement therapy for 3 years, and vitiligo treated with Tacrolimus for 2 years, presented

with urticarial lesions evolving over 4 weeks in a context of apyrexia and preserved general status. Laboratory workup revealed a TSH level of 9 IU and anti-TPO antibodies greater than 1000 IU; the workup for associated autoimmune diseases was negative. Skin biopsy showed an edematous dermis with a lymphoplasmacytic infiltrate, rich in eosinophilic polynuclear cells in places, predominantly perivascular and perifollicular. Due to the persistence of lesions and debilitating pruritus under a double dose of a double antihistamine therapy, and the rebound effect upon discontinuing corticosteroid therapy she had self-prescribed, the patient was started on antileukotrienes along with an upward adjustment of her hormone replacement therapy. The clinical course was favorable after two weeks.



Figures 1 and 2: Showing urticarial lesions predominantly affecting the upper half of the body, along with vitiligo lesions



Figures 3 and 4: Showing an edematous dermis with a lymphoplasmacytic infiltrate, rich in eosinophilic polynuclear cells in places, predominantly perivascular and perifollicular

DISCUSSION

The prevalence of the association between chronic spontaneous urticaria and thyroid autoimmunity varies across populations, ranging from 6.5% to 57.4% with a mean of 20.1%, showing a clear progressive increase (14% in 2000 to 27% in 2010). Five pathophysiological hypotheses explain this association: the role of anti-thyroid IgE-type autoantibodies, the consequences of complement activation, the pro-inflammatory role of TSH, mast cell-thyroid hormone interactions, and the implication of certain infectious agents. Several studies demonstrate the role of Levothyroxine treatment in chronic urticaria; however, the modalities remain controversial (lack of consensus) [3-6].

CONCLUSION

The association between chronic spontaneous urticaria and thyroid autoimmunity is increasingly recognized and rising for multiple reasons. Awareness of this link has a dual implication: diagnostic, involving the systematic screening for autoimmune thyroiditis in any case of chronic spontaneous urticaria, especially in young women; and therapeutic, through Levothyroxine treatment for hypothyroid patients.

Conflict of Interests: The authors declare no conflict of interest for this work.

REFERENCES

1. J. Libbey *et al.*, : progres en dermatologie allergologie, Lyon:1999
2. L. Grosa: Urticaire et auto-immunité thyroïdienne-à propos d'une série nancéenne de 109 cas. http://docnum.univ-lorraine.fr/public/SCDMED_T_2011_GROZA_LELIA.pdf
3. D. Zauli *et al.*,: Thyroid autoimmunity in chronic idiopathic urticaria: implications for therapy: Am J Cli Dermatol:2002, 3(8): 525-8.
4. E. Collete *et al.*,: Urticaire chronique et pathologie thyroïdienne auto-immune : annales dermatologie et vénéréologie: 1995, vol. 122, n°6-7, pp. 413-416 (9 ref.)
5. V. Nuzzo *et al.*,: Idiopathic chronic urticaria and thyroid autoimmunity: Dermatoendocrinol. 2011 Oct-Dec; 3(4): 255–258.
6. M. Aversano *et al.*,: Allergie et auto-immunité: Urticaire et Thyroïde: Allergy 60 (4), 489-493