GEORGIAN MEDICAL NEWS

ISSN 1512-0112

NO 2 (372) Февраль 2026

ТБИЛИСИ - NEW YORK

ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии

საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

Monthly Georgia-US joint scientific journal published both in electronic and paper formats of the Agency of Medical Information of the Georgian Association of Business Press. Published since 1994. Distributed in NIS, EU and USA.

GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНИТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через **полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра**. Используемый компьютерный шрифт для текста на русском и английском языках - **Times New Roman** (**Кириллица**), для текста на грузинском языке следует использовать **AcadNusx.** Размер шрифта - **12**. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.

2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.

3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).

5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. **Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи**. Таблицы и графики должны быть озаглавлены.

6. Фотографии должны быть контрастными, фотокопии с рентгенограмм - в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста **в tiff формате**.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов - http://www.spinesurgery.ru/files/publish.pdf и http://www.nlm.nih.gov/bsd/uniform_requirements.html
В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.

9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.

10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.

11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректура авторам не высылается, вся работа и сверка проводится по авторскому оригиналу.

12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

1. Articles must be provided with a double copy, in English or Russian languages and typed or compu-ter-printed on a single side of standard typing paper, with the left margin of **3** centimeters width, and **1.5** spacing between the lines, typeface - **Times New Roman** (**Cyrillic**), print size - **12** (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.

2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.

5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. **Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles.** Tables and graphs must be headed.

6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf
In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.

10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.

11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.

12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

Articles that Fail to Meet the Aforementioned Requirements are not Assigned to be Reviewed.

ავტორთა საყურადღებოდ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დავიცვათ შემდეგი წესები:

1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე,დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში - **Times New Roman (Кириллица)**, ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ **AcadNusx.** შრიფტის ზომა – 12. სტატიას თან უნდა ახლდეს CD სტატიით.

2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ, რუსულ და ქართულ ენებზე) ჩათვლით.

3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

GEORGIAN MEDICAL NEWS
NO 2 (371) 2026

Содержание:

GEORGIAN MEDICAL NEWS
No 1 (370) 2026

CHRONIC URTICARIA RELATED TO *HELICOBACTER PYLORI* INFECTION – A CASE REPORT

Ketevan Omiadze[1]*, Alikya Chipurupalli[1], Tea Abzhandadze[1].

European University, Georgia..

Abstract.

Chronic urticaria (CU) is a complex inflammatory skin disorder characterized by recurrent wheals and pruritus lasting longer than six weeks, often resulting in significant impairment in quality of life, sleep disturbance, and psychological distress. Although the majority of cases are classified as chronic spontaneous urticaria without identifiable triggers, a growing body of literature suggests that persistent infections may contribute to disease pathogenesis through immune-mediated mechanisms. *Helicobacter pylori* infection has been increasingly investigated because of its ability to induce chronic systemic inflammation, autoantibody production, and mast cell activation. We present a case of a 34-year-old male with a two-year history of recurrent urticaria that progressed to near-daily episodes over a three-month period. The patient also reported chronic dyspeptic symptoms including heartburn and epigastric discomfort. Laboratory investigations revealed normal complete blood count parameters, normal liver function tests, normal total IgE levels, and mildly elevated C-reactive protein. Stool antigen testing confirmed *H. pylori* infection and endoscopy demonstrated chronic gastritis. Following completion of eradication therapy, the patient remained symptom-free for two consecutive months, with subsequent stool antigen testing confirming successful eradication. This report highlights the potential pathogenetic role of *H. pylori* infection in selected patients with chronic urticaria and emphasizes the importance of targeted evaluation based on clinical presentation.

Key words. Chronic urticaria, *Helicobacter pylori*, chronic gastritis, mast cell activation, infection-associated urticaria.

Introduction.

Urticaria is a heterogeneous group of dermatologic disorders characterized by transient wheals, erythema, edema, and intense pruritus resulting from activation and degranulation of dermal mast cells and basophils with subsequent release of histamine and other inflammatory mediators [1,2]. Chronic urticaria (CU), defined by the presence of recurrent symptoms persisting for more than six weeks, represents a complex clinical entity involving autoimmune mechanisms, dysregulated innate immunity, chronic inflammation, and environmental or infectious triggers [1,3-5].

The pathogenesis of chronic urticaria is multifactorial. Autoimmune pathways involving IgG autoantibodies directed against the high-affinity IgE receptor (FcεRI) or IgE itself have been demonstrated in a subset of patients, contributing to spontaneous mast cell activation [1,4,6]. In addition, dysregulation of complement pathways, alterations in coagulation cascades, and increased expression of pro-inflammatory cytokines such as interleukin-6, interleukin-8, and tumor necrosis factor-alpha further amplify cutaneous inflammation [2-4]. However, despite advances in understanding immune mechanisms, a significant proportion of cases remain idiopathic, prompting investigation into additional triggers including chronic infections [7-9].

Helicobacter pylori is a gram-negative microaerophilic bacterium that colonizes the gastric mucosa and affects a large proportion of the global population. Beyond its established role in gastritis and peptic ulcer disease, *H. pylori* have been implicated in extra-gastric manifestations including dermatologic conditions through systemic immune activation and molecular mimicry [10-12]. Chronic colonization induces persistent antigenic stimulation leading to cytokine release, immune complex formation, and potential cross-reactivity between bacterial and host antigens [12,13].

Several epidemiologic studies have demonstrated an increased prevalence of *H. pylori* infection among patients with chronic urticaria compared with healthy controls [8-10]. Furthermore, multiple observational studies and meta-analyses report improvement or remission of urticaria following successful eradication therapy, suggesting a possible causal association in selected individuals [14-16]. Despite ongoing debate regarding routine screening, international urticaria guidelines recommend targeted evaluation when patients present with gastrointestinal symptoms, refractory disease, or laboratory evidence of inflammation [17,18].

This case report describes a young adult male with chronic urticaria associated with *H. pylori* infection and highlights clinical remission following eradication therapy, contributing further evidence supporting infection-related pathogenesis in selected patients.

Timeline.

2023- 2025: Intermittent urticaria episodes initially triggered by alcohol intake.

July- October, 2025: Progression to near-daily urticaria independent of dietary triggers.

21-10-2025: Laboratory investigations performed demonstrating normal CBC, normal liver function tests, normal ESR, and mildly elevated CRP (5.40 mg/L).

22-10-2025: Stool antigen testing positive for *Helicobacter pylori*.

Late October, 2025: Upper gastrointestinal endoscopy revealed chronic gastritis. Diagnosis established and eradication therapy initiated.

Late October to mid- November: Completion of 14-day eradication therapy with concurrent antihistamines.

End of November,2025: Treatment completed with marked improvement in symptoms.

December 2025- January, 2026: Complete absence of urticaria symptoms without recurrence.

20-1-2026: Repeat stool antigen testing negative for *Helicobacter pylori*, confirming eradication.

Case Report.

A 34-year-old male presented with a two-year history of intermittent urticarial wheals that progressed to near-daily episodes over three months. Initial flares were associated with alcohol intake but later occurred without identifiable triggers. The patient reported chronic heartburn and epigastric discomfort but denied medication allergies, food allergies, or family history of atopy.

On examination, transient erythematous wheals were observed without angioedema, mucosal involvement, or systemic manifestations.

Laboratory investigations performed on 2025-10-21 demonstrated normal erythrocyte count, hemoglobin, hematocrit, red cell indices, and white cell differential, indicating absence of anemia or leukocytosis. Platelet counts and indices were within normal limits with only minimal variations considered clinically insignificant. Liver function tests including ALT, AST, ALP, GGT, and bilirubin fractions were within reference ranges, excluding hepatobiliary disease. ESR was normal, suggesting absence of significant systemic inflammatory disease. Total IgE levels were within normal limits 3.07 U/ml, reducing the likelihood of an atopic or allergic etiology. C-reactive protein was mildly elevated at 5.40 mg/L. This minimal elevation is nonspecific and may be influenced by a variety of minor inflammatory or physiological factors. While such findings have been described in chronic infections, including *Helicobacter pylori*, the CRP value in isolation was not considered diagnostic of systemic inflammation and was interpreted only in conjunction with the broader clinical context (Refer to Table 1).

Given persistent gastrointestinal symptoms, stool antigen testing for *Helicobacter pylori* was performed on 2025-10-22 and returned positive. Upper gastrointestinal endoscopy demonstrated chronic gastritis.

The patient received standard eradication (triple therapy regimen) therapy combined with antihistamines [19]. The treatment course lasted 14 days and was completed by the end of November 2025. During therapy, the frequency and severity of urticaria episodes declined significantly. Antihistamines were discontinued after completion of eradication therapy. The patient remained completely symptom-free throughout December 2025 and January 2026. Follow-up stool antigen testing performed on January 20, 2026 confirmed successful eradication, and no recurrence of urticaria was reported during the observed follow-up period.

Results and Discussion.

Chronic urticaria is increasingly recognized as a systemic inflammatory disorder rather than solely a cutaneous condition, with infections acting as persistent immune triggers capable of sustaining mast cell activation [3-5,9]. Among infectious agents, *Helicobacter pylori* have been widely investigated due to its capacity to induce chronic immune stimulation, autoimmunity, and systemic cytokine release [10-12].

Epidemiologic studies have demonstrated a higher prevalence of *H. pylori* infection in patients with chronic urticaria compared with control populations [8,9]. Several clinical studies report symptomatic improvement following eradication therapy, with meta-analyses suggesting remission in a subset of affected individuals [14,15]. Although heterogeneity exists among studies, accumulating evidence supports a contributory role in selected cases.

Multiple mechanisms have been proposed to explain the association between *H. pylori* and chronic urticaria. Chronic gastric colonization results in sustained release of inflammatory cytokines including IL-6, IL-8, and TNF-α, promoting systemic immune activation and lowering the threshold for mast cell degranulation [12,13]. Molecular mimicry between bacterial antigens and host proteins may induce autoantibody production targeting FcεRI receptors on mast cells, facilitating spontaneous histamine release [1,4,6]. Additionally, circulating immune complexes and complement activation contribute to vascular permeability and wheal formation [2,3].

Although CRP was marginally elevated, this finding was nonspecific and could reflect minor physiological or inflammatory variations unrelated to infection. Therefore, CRP was not used as definitive evidence of systemic inflammation but rather interpreted cautiously within the overall clinical and microbiologic findings.

The temporal association between eradication therapy and complete remission strengthens the likelihood of a causal relationship. Current EAACI/GA²LEN/EuroGuiDerm/APAAACI guidelines recommend individualized diagnostic evaluation and support infection testing when clinically indicated [18]. The presence of dyspeptic symptoms in this case justified targeted testing and allowed identification of a potentially reversible trigger [20]. Importantly, remission persisted after discontinuation of antihistamines, suggesting that symptom resolution was not solely attributable to pharmacologic suppression but may reflect an underlying infection-associated trigger.

Alcohol intake was initially reported as a trigger for urticaria episodes in this patient. Alcohol is a well-recognized exacerbating factor in chronic urticaria due to its vasodilatory effects, ability to enhance histamine release, and potential to lower the threshold for mast cell degranulation [1,2]. However, in the present case, urticaria progressed to occur independently of alcohol consumption during the months preceding diagnosis, suggesting an underlying persistent inflammatory or immune trigger rather than a purely exposure-related phenomenon. Chronic *Helicobacter pylori* infection has been associated with systemic immune activation, cytokine release, and increased mast cell sensitivity, potentially amplifying responses to otherwise minor triggers such as alcohol [8,9,12,13,16]. The complete remission of urticaria following eradication therapy, particularly after discontinuation of antihistamines, further supports the possibility that alcohol functioned as an early exacerbating cofactor rather than the primary etiologic driver [14,15]. Notably, after eradication, the patient did not report recurrence of urticaria even with occasional alcohol intake.

Although eradication therapy does not universally improve chronic urticaria, this case supports a growing body of literature suggesting that evaluation for *H. pylori* may be beneficial in selected patients, particularly those with gastrointestinal symptoms, inflammatory markers, or treatment-resistant

Table 1. *Baseline Laboratory Evaluation (21 October 2025) and Infection Testing.*

Parameter	Result	Reference Range	Interpretation
Hematology			
RBC	5.34 ×10¹²/L	4.4–5.7	Normal
Hemoglobin	15.5 g/dL	13.5–17.5	Normal
Hematocrit	46.8 %	40–50	Normal
MCV	87.6 fL	80–97	Normocytic
MCH	29.0 pg	26–33	Normal
MCHC	33.1 g/dL	32–36	Normal
RDW-SD	39.1 fL	37.1–49.2	Normal
RDW-CV	12.3 %	11–16	Normal
NRBC %	0.0 %	0–0.5	Normal
NRBC #	0.00 ×10¹²/L	0–0.03	Normal
Platelets			
Platelet Count	235 ×10⁹/L	150–400	Normal
PCT	0.21 %	0.12–0.35	Normal
MPV	9.0 fL	6.5–12	Normal
PDW	9.6 fL	9.9–16.1	Slightly low (not clinically significant)
P-LCR	17.2 %	17.5–42.3	Borderline low
Leukocytes			
WBC	7.02 ×10⁹/L	4–11	Normal
IG %	0.6 %	0–0.6	Upper normal
IG #	0.04 ×10⁹/L	0–0.06	Normal
Neutrophils %	53.4 %	50–70	Normal
Neutrophils #	3.75 ×10⁹/L	2–7	Normal
Lymphocytes %	34.3 %	20–40	Normal
Lymphocytes #	2.41 ×10⁹/L	0.8–4	Normal
Monocytes %	8.8 %	4–10	Normal
Monocytes #	0.62 ×10⁹/L	0.2–1.1	Normal
Eosinophils %	2.6 %	1–4.4	Normal
Eosinophils #	0.18 ×10⁹/L	0.04–0.4	Normal
Basophils %	0.9 %	0–1	Normal
Basophils #	0.06 ×10⁹/L	0–0.1	Normal
ESR	7 mm/h	<15	Normal
IgE	3.07 U/ml	0-100	Normal
Inflammation Marker			
CRP	5.40 mg/L	0–5	Mild elevation
Liver Function Tests			
Total Bilirubin	8.3 µmol/L	2–20.5	Normal
Direct Bilirubin	2.0 µmol/L	0.8–5	Normal
Indirect Bilirubin	6.3 µmol/L	1.2–15.5	Normal
ALP	68.7 U/L	35–129	Normal
GGT	29 U/L	8–50	Normal
ALT	33.2 U/L	5–40	Normal
AST	18.5 U/L	5–40	Normal
Helicobacter pylori Testing			
Stool Antigen (22 Oct 2025)	Positive (+)	Negative	Active infection
Stool Antigen (20 Jan 2026)	Negative (−)	Negative	Eradication confirmed

Abbreviations: RBC-Red Blood Cell, MCV - Mean Corpuscular Volume, MCH- Mean Corpuscular Hemoglobin, MCHC- Mean Corpuscular Hemoglobin Concentration, RDW-SD-Red Cell Distribution Width – Standard Deviation, RDW-CV-Red Cell Distribution Width-Coefficient of Variation, NRBC- nucleated red blood cell, MPV- Mean Platelet Volume, PDW - Platelet Distribution Width, P-LCR - Platelet Large Cell Ratio, WBC- White Blood Cells, IG– Immature Granulocytes, ESR -Erythrocyte Sedimentation Rate, IgE- Immunoglobulin E, CRP- C- Reactive protein, ALP- Alkaline Phosphatase, GGT- Gamma Glutamyl Transferase, ALT - Alanine Aminotransferase, AST- Aspartate Aminotransferase.

disease. Further controlled studies are required to clarify pathophysiological pathways and identify predictive factors for treatment response.

Conclusion.

This case demonstrates a probable association between chronic urticaria and *Helicobacter pylori* infection, with complete remission achieved following eradication therapy. Targeted infectious evaluation may identify reversible causes and improve outcomes in selected patients with chronic urticaria.

Conflicts of interest.

We declare no conflicts of interest or financial interests that the authors or members of their immediate families have in any product or service discussed in the manuscript.

Funding.

None.

Ethics approval.

Not Applicable.

REFERENCES

1. Kaplan AP. Chronic spontaneous urticaria: pathogenesis and treatment considerations. J Allergy Clin Immunol. 2014;133:1270-1277.
2. Maurer M, Altrichter S, Schmetzer O, et al. Mast cell activation pathways in chronic urticaria. Allergy. 2011;66:317-330.
3. Deza G, Bertolín-Colilla M, Pujol RM, et al. Chronic spontaneous urticaria pathogenesis and treatment advances. J Allergy Clin Immunol Pract. 2020;8:1520-1528.
4. Kolkhir P, Metz M, Altrichter S, et al. Chronic spontaneous urticaria: recent advances in pathogenesis and therapy. J Allergy Clin Immunol Pract. 2020;8:1520-1530.
5. Weller K, Viehmann K, Bräutigam M, et al. Chronic urticaria: current concepts and treatment. J Eur Acad Dermatol Venereol. 2013;27:1003-1011.
6. Kolkhir P, Church MK, Weller K, et al. Autoimmune chronic spontaneous urticaria: mechanisms and clinical implications. Allergy. 2021;76:2841-2853.
7. Caffarelli C, Cuomo B, Cardinale F, et al. Etiologic factors associated with chronic urticaria. Acta Derm Venereol. 2013;93:268-272.
8. Kolkhir P, Altrichter S, Hawro T, et al. Comorbidity of chronic spontaneous urticaria and infections. Allergy. 2016;71:685-693.
9. Minciullo PL, Cascio A, Gangemi S. Infection-related chronic urticaria. Allergy Asthma Proc. 2018;39:e25-e31.
10. Magen E, Delgado JS. *Helicobacter pylori* and skin disorders. World J Gastroenterol. 2014;20:1510-1520.
11. Ojetti V, Armuzzi A, De Luca A, et al. Gastritis and dermatologic disease association. Dig Dis Sci. 2012;57:1526-1530.
12. Sugimoto M, Yamaoka Y. *Helicobacter pylori* and systemic inflammatory responses. World J Gastroenterol. 2020;26:3819-3834.
13. Kolkhir P, Metz M, Maurer M. Infection-associated chronic spontaneous urticaria: current concepts. Clin Rev Allergy Immunol. 2022;63:213-226.
14. Kim JH, Lee JY, Kim YJ, et al. Association between *Helicobacter pylori* eradication and improvement of chronic spontaneous urticaria: systematic review and meta-analysis. J Dermatolog Treat. 2021;32:783-790.
15. Shakouri AA, Bahna SL. *Helicobacter pylori* infection and chronic urticaria: a meta-analysis. Allergy Asthma Proc. 2013;34:398-403.
16. Yadav MK, Rani A. Association of *Helicobacter pylori* with dermatologic disorders. Indian J Dermatol. 2018;63:3-9.
17. Zuberbier T, Aberer W, Asero R, et al. EAACI/GA²LEN/EDF/WAO urticaria guideline update. Allergy. 2018;73:1393-1414.
18. Zuberbier T, Abdul Latiff AH, Abuzakouk M, et al. International EAACI/GA²LEN/EuroGuiDerm/APAAACI urticaria guideline. Allergy. 2022;77:734-766.
19. Chey WD, Leontiadis GI, Howden CW, et al. ACG clinical guideline: treatment of *Helicobacter pylori* infection. Am J Gastroenterol. 2017;112:212-239.
20. Malfertheiner P, Megraud F, O'Morain CA, et al. Management of *Helicobacter pylori* infection—the Maastricht V/Florence consensus report. Gut. 2017;66:6-30.