Received: 25 August 2021 | Revised: 27 September 2021 | Accepted: 25 October 2021

DOI: 10.1002/cia2.12220

Journal of Cutaneous Immunology and Allergy

WILEY

CORRESPONDENCE

Impact of physicians' clinical experience and workplace on patients' care of urticaria in Japan: A sub-analysis of a nation-wide cross-sectional web questionnaire survey

The considerable impact of urticaria on patients highlights the need for its appropriate management. We previously performed a web-based questionnaire on the real-world clinical management of urticaria in Japan.[1,2] We here sub-analyze the data from 189 physicians (Appendix S1), stratified by the type of participants' workplaces and length of their dermatological experience. The full data set is provided in the Figures S1-S3.

Treatments for acute spontaneous urticaria (ASU) showed no difference by length of dermatological experience. Among treatments for chronic spontaneous urticaria (CSU), 300 mg omalizumab was administered every 4 weeks after remission predominantly by physicians with ≤10 years' experience (Figure 1A). Corticosteroids for CSU and spontaneous angioedema were used by physicians with experience ≥21 years more than those with ≤20 years (Figure 1B,C). Corticosteroids were used for ASU by more than half of the participants. Physicians in national/public hospitals used corticosteroids when H1-antihistamines were ineffective compared with the other physicians (Figure 1D). Approximately half of physicians in clinics and other hospitals used antibiotics for ASU, while two-thirds of those in university and national/public hospitals did so when ASU was accompanied by infection symptoms, or increases in white blood cell/C-reactive protein (CRP) (Figure 1E).

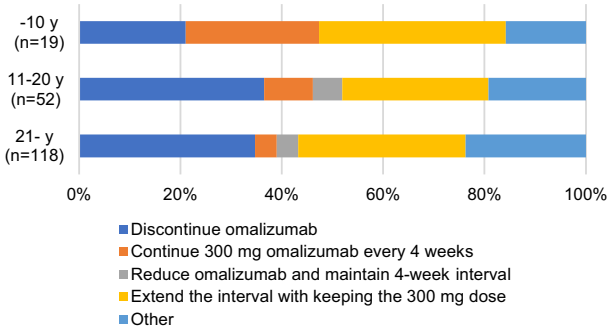
Antinuclear antibody, serum IgE, and specific IgE were tested for CSU more by physicians with experience of ≤10 years than those with longer experience (Figure 1F). Physicians in university, national/public, and other hospitals performed mainly blood cell counts, biochemistry, CRP/blood sedimentation rate, antinuclear antibody, blood coagulation tests, and total IgE more than those in clinics (Figure 1G). Given that most physicians with ≤10 years' experience work in hospitals (Figure S1c), the extensive examinations may be explained by more severe disease in patients visiting high care hospitals.

As for inducible urticaria (IndU), the longer physicians worked clinically, the more types of IndU and provocation tests for solar urticaria they experienced (Figure S3, Q22, 23). However, the length of experience did not affect whether and how to perform skin tests and provocation tests for allergic and aspirin-induced urticarias (Figure S3, Q12-14, 16, 18-20). Skin tests and/or provocation tests for allergic, aspirin-induced, and solar urticarias are performed more in larger hospitals (Figure S2, Q12, 14, 18). These may depend on available equipment and risk management in participants' institutions. For patients with cholinergic urticaria, physicians in university hospitals paid more attention to the presence of atopic dermatitis, hypersensitivity to sweat, and hypohidrosis, and conduct provocation tests, maybe to manage intractable cases (Figure S2, Q25).

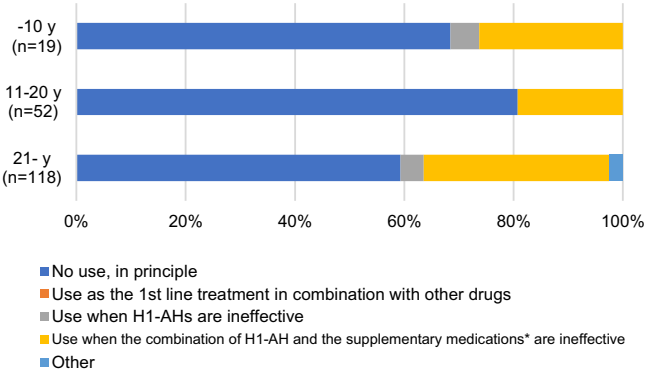
In the literature on the real-world management of urticaria, analyses were performed by several specialties but not by length of experience and workplaces.[3–5] While we previously showed that management of spontaneous urticaria and angioedema were mostly in line with the Japanese guideline,[1,6] this study revealed that treatments and examinations are affected by length of experience and type of workplace. This study enrolled a limited number of participants in young age at clinics, but suggests importance of continuous updating of physicians with the latest guidelines and medical information, regardless of age and workplaces.

FIGURE 1 Results of the questionnaire stratified by participants' length of clinical experience and workplaces. Full sets of data including panels of figure are provided in Supplementary Data (Figure S1-S3). *Supplementary medications include H2-antihistamine, antileukotriene, tranexamic acid, etc. **Blood coagulation test includes D-dimer, etc. ANA, antinuclear antibody; CBC, complete blood count; CRP, C-reactive protein; ESR, erythrocyte sedimentation rate; H1-AH, H1-antihistamines; Hp, *Helicobacter pylori*; WBC, white blood cell count; y, years of clinical experience of dermatology

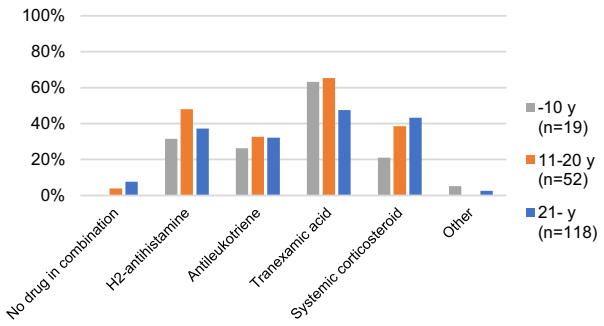
(A) When a patient with chronic spontaneous urticaria was treated with omalizumab (300 mg/month) and remained completely symptom-free for 3 months, how would you continue the administration of omalizumab thereafter? An approved dose of H1-AH is used as a basic treatment. (1 choice) (Q11, n=189)



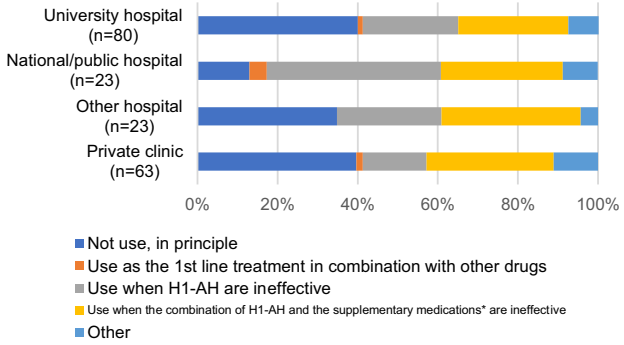
(B) Do you use systemic corticosteroids in the treatment of chronic spontaneous urticaria? (1 choice) (Q9, n=189)



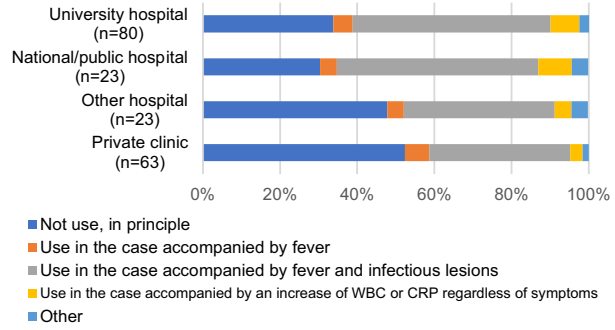
(C) Which drugs do you add when H1-AHs are ineffective in the treatment of spontaneous angioedema? (Multiple answers allowed) (Q27, n=189)



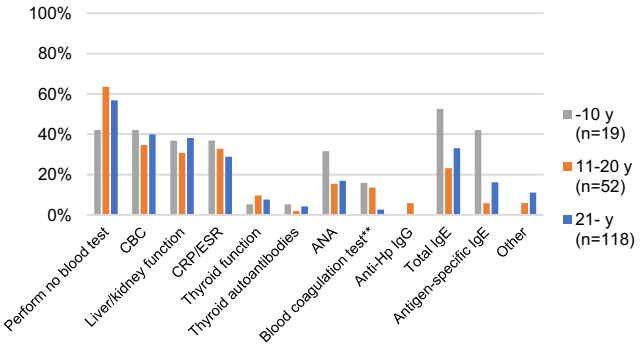
(D) Do you administer systemic corticosteroids in the treatment of acute spontaneous urticaria? (1 choice) (Q4, n=189)



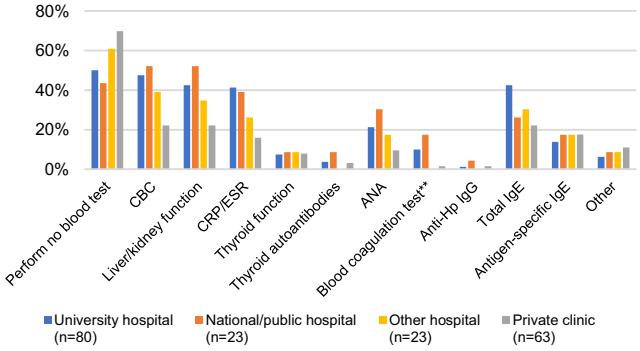
(E) Do you administer antibiotics in the treatment of acute spontaneous urticaria? (1 choice) (Q5, n=189)



(F) Which blood tests do you routinely perform for chronic spontaneous urticaria? (Multiple answers allowed) (Q6, n=189)



(G) Which blood tests do you routinely perform for chronic spontaneous urticaria? (Multiple answers allowed) (Q6, n=189)



ACKNOWLEDGMENTS

We appreciate the members of the Japanese Society for Cutaneous Immunology and Allergy for their participation in the survey. We also thank Dr. Faiz Kermani for his review of the manuscript.

DECLARATION SECTION

Approval of the research protocol: This study was approved by the ethics committee of the Japanese Society for Cutaneous Immunology and Allergy (JSCIA).
Informed Consent (especially for Case): N/A (this web-based questionnaire survey did not involve patients).
Registry and the Registration No. of the study/trial: N/A.
Animal Studies: N/A.

CONFLICT OF INTEREST

ST reports speaker's fee from Novartis Pharma. MH reports speaker's fee from Taiho Pharmaceutical, Novartis Pharma, and Mitsubishi-Tanabe. TN reports speaker's fee from Maruho Co., Ltd., and Sanofi, K.K., and belonging to the endowed division sponsored by Maruho Co., Ltd. AF reports speaker's fee from Taiho Pharmaceutical and Novartis Pharma, and research funding from Taiho Pharmaceutical. KH reports speaker's fee from Kaken Pharmaceutical, Kyorin, Meiji Seika Pharma, Mitsubishi-Tanabe, Novartis Pharma, Sanofi, Taiho Pharmaceutical, and research grants from Kaken Pharmaceutical, Mitsubishi-Tanabe, and Taiho Pharmaceutical.

Dr. Michihiro Hide is a member of the Journal of Cutaneous Immunology and Allergy Editorial Board. Management of the peer-review process, and all editorial decision-making, for this article was undertaken by Editor in Chief.

Shunsuke Takahagi MD, PhD[1]
Akiko Kamegashira MD, PhD[1]
Naoko Inomata MD, PhD[2]
Atsushi Fukunaga MD, PhD[3]
Takeshi Nakahara MD, PhD[4]
Koremasa Hayama MD, PhD[5]
Michihiro Hide MD, PhD[1,6]

[1]*Department of Dermatology, Graduate School of Biomedical & Health Sciences, Hiroshima University, Hiroshima, Japan*
[2]*Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Kobe, Japan*
[3]*Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama, Japan*
[4]*Division of Skin Surface Sensing, Department of Dermatology, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan*
[5]*Division of Cutaneous Science, Department of Dermatology, Nihon University School of Medicine, Tokyo, Japan*
[6]*Department of Dermatology, Hiroshima City Hospital, Hiroshima, Japan*

Correspondence
Michihiro Hide, MD, PhD, Department of Dermatology, Hiroshima City Hospital, 7-33 Motomachi, Naka-ku, Hiroshima 730-8518, Japan.
Email: ed1h-w1de-road@hiroshima-u.ac.jp

ORCID

Shunsuke Takahagi https://orcid.org/0000-0001-9951-1342
Koremasa Hayama https://orcid.org/0000-0001-8651-2493
Michihiro Hide https://orcid.org/0000-0002-1569-6034

REFERENCES

1. Takahagi S, Kamegashira A, Inomata N, Fukunaga A, Nakahara T, Hayama K, et al. Real-world clinical practice of chronic inducible urticaria and urticaria due to type I allergy or intolerance in Japan: a nation-wide cross-sectional web questionnaire survey. J Cutan Immunol Allergy. 2019;2:150–2.
2. Takahagi S, Kamegashira A, Fukunaga A, Inomata N, Nakahara T, Hayama K, et al. Real-world clinical practices for spontaneous urticaria and angioedema in Japan: a nation-wide cross-sectional web questionnaire survey. Allergol Int. 2020;69:300–3.
3. Cherrez A, Maurer M, Weller K, Calderon JC, Simancas-Racines D, Cherrez OI. Knowledge and management of chronic spontaneous urticaria in Latin America: a cross-sectional study in Ecuador. World Allergy Organ J. 2017;10:21.
4. Weller K, Viehmann K, Bräutigam M, Krause K, Siebenhaar F, Zuberbier T, et al. Management of chronic spontaneous urticaria in real life–in accordance with the guidelines? A cross-sectional physician-based survey study. J Eur Acad Dermatol Venereol. 2013;27:43–50.
5. Kolkhir P, Pogorelov D, Darlenski R, Caminati M, Tanno LK, Le Pham D, et al. Management of chronic spontaneous urticaria: a worldwide perspective. World Allergy Organ J. 2018;11:14.
6. Hide M, Morioke S, Fukunaga A, Hiragun T, Chinuki Y, Inomata N, et al. Japanese guidelines for diagnosis and treatment of urticaria 2018. Jpn J Dermatol. 2018;128:2503–624.

SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

How to cite this article: Takahagi S, Kamegashira A, Inomata N, Fukunaga A, Nakahara T, Hayama K, et al. Impact of physicians' clinical experience and workplace on patients' care of urticaria in Japan: A sub-analysis of a nation-wide cross-sectional web questionnaire survey. J Cutan Immunol Allergy. 2022;5:106–108. https://doi.org/10.1002/cia2.12220