

Clinical Insights: Evaluating the Efficacy of Levocetirizine in Treating Urticaria

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Abstract

Urticaria is a skin disorder marked by wheals and/or angioedema. It mostly presents in two forms: Chronic and acute. There is a probability of the progression of urticaria into the chronic form which exerts a substantial burden on the patient's routine life and health-care setup. Insights into the disease mechanism can help physician's optimize clinical outcomes. Histamine is found in the mast cells of the skin, and activated histamine receptors play a prime role in triggering manifestations of urticaria. Second-generation antihistamines are the optimal treatment option for antagonizing the action of histamine. These medicines help control the skin's reactivity to the histamine and are the preferred first-line treatment approach for managing all forms of urticaria. Levocetirizine stands out as a highly effective antihistamine, exhibiting effective clinical outcomes and offering rapid onset, high bioavailability, and effective relief from the symptoms of urticaria for a prolonged period of up to 24 h. This expert opinion article highlights the potency of second-generation antihistamines, particularly levocetirizine in the effective treatment of allergic skin conditions such as urticaria and its subtypes such as chronic urticaria.

Key words: Chronic urticaria, Histamine, Levocetirizine, Second-generation antihistamines, Updosing

URTICARIA: AN ALLERGIC SKIN CONDITION

Urticaria is an allergic skin condition that is identified by the emergence of wheals (hives), angioedema, or both. Urticaria is classified as chronic and acute based on duration and inducible or spontaneous based on triggers. Acute urticaria is marked by the presence of wheals, angioedema, or both for 6 weeks or less, whereas it lasts for more than 6 weeks in the case of chronic urticaria (CU).^[1]

CU is disabling and affects routine activities at work and school. It substantially burdens the patient's family, health-care system, and society.^[1] It is estimated that approximately 12–22% of the population will experience symptoms of urticaria once in a lifetime. Urticaria might progress into its chronic form in around 25% of the affected patients.^[2]

PATHOPHYSIOLOGY OF URTICARIA

The key mediator of urticaria is histamine, which is found in the mast cells of the skin. The histamine receptors H1, H2, and H4 play an important role in the pathophysiology of urticaria.^[2] Activation of these histamine receptors on cutaneous blood vessels causes vasodilation and increased vascular permeability, leading to manifestations such as itching, flushing erythema, and edema, as shown in Figure 1.^[2] In addition, basophils and non-histamine mast cell mediators may also impact urticaria pathogenesis, but their exact roles are still unclear.^[2]

Understanding the pathophysiology of urticaria has led to the designing of advanced treatment strategies and guidelines for physicians, improving patient outcomes.^[2]

TREATMENT OF URTICARIA: ROLE OF SECOND-GENERATION H1-ANTIHISTAMINES

Second-generation H1-antihistamines exhibit enhanced peripheral H1-receptor selectivity, reduced lipophilicity, and antiallergic properties, compared to their first-generation

Access this article online



www.ijss-sn.com

Month of Submission : 05-2024
Month of Peer Review : 06-2024
Month of Acceptance : 07-2024
Month of Publishing : 07-2024

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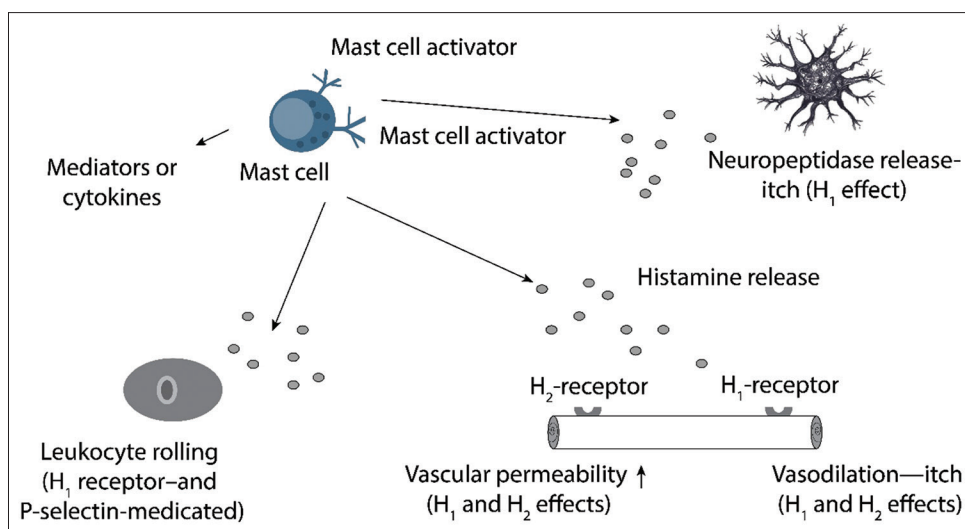


Figure 1: Histamine's role in the development of urticaria. (Adapted from Ortonne, 2012)^[2]

counterparts.^[3] The literature supports the use of bilastine, cetirizine, desloratadine, ebastine, fexofenadine, levocetirizine, loratadine, and rupatadine for managing urticaria.^[1]

These medicines inhibit mediator release from mast cells and basophils by blocking calcium ion influx and intracellular calcium ion release. They also act on leukotrienes or prostaglandins, with some exerting mild anti-inflammatory effects.^[3] Second-generation antihistamines showing more selectivity to H₁ receptors such as fexofenadine, loratadine, and cetirizine do not cross the blood-brain barrier, leading to fewer sedative side effects. Levocetirizine and desloratadine may be better suited for patients sensitive to sedating side effects.^[4]

THE INTERNATIONAL EAACI/GA²LEN/EUROGUIDERM/APAACI GUIDELINE RECOMMENDS^[4]

- Utilizing standard-dosed modern second-generation H₁-antihistamine as the first-line treatment for all types of urticaria
- Updosing of a second-generation H₁-antihistamine up to four-fold in patients with CU unresponsive to a standard dose as a second-line treatment before other treatments is considered
- Second-generation H₁-antihistamines are to be taken regularly for the treatment of patients with CU
- Against using different H₁-antihistamines at the same time
- Against consumption of a higher than four-fold dose as it has not been tested.

No severe adverse events associated with the updosing have been reported in the literature on long-term intake and potential accumulation.^[1]

LEVOCETIRIZINE: A POTENTIAL SECOND-GENERATION H₁-ANTIHISTAMINE

Levocetirizine is a selective H₁-receptor antagonist and is the R-enantiomer or active isomer of the racemate cetirizine. It shows enhanced safety due to the small volume of distribution and low binding to cerebral receptors. In comparison to cetirizine, levocetirizine has more affinity for the H₁ receptor and exhibits its potency by efficient inhibition of histamine-induced wheal and flare reactions.^[5] It also demonstrates the quick onset of action, high bioavailability, high affinity, and occupancy toward the H₁ receptor. Levocetirizine is a safe and effective therapeutic agent for the treatment of allergic rhinitis and chronic idiopathic urticaria (CIU) in adults and children with minimal adverse events.^[6] Levocetirizine at a dose of 5 mg daily exhibits a broad anti-inflammatory effect in patients with CU.^[6] It shows potential activity in suppressing skin reactivity to histamine. In addition, levocetirizine surpasses other antihistamines by inducing long-lasting, high levels of inhibition.^[5]

CLINICAL EVIDENCE ON THE EFFICACY OF LEVOCETIRIZINE

Levocetirizine was reported to be superior to fexofenadine in providing anti-H₁ activity for a prolonged 24-h period, as assessed by thermography and supported by the percentages of receptor occupancy estimated for both drugs.^[7] Administration of levocetirizine once-daily (OD) was found to be effective and well-tolerated in CU patients, alleviating daily episodes and several wheals and severity of the condition.^[5]

A study done by Kapp *et al.* revealed that levocetirizine 5 mg OD demonstrated a rapid and sustained relief of CIU

symptoms, primarily the wheal volume, but also improved the quality of life of patients and enhanced their work productivity.^[8]

Another study done by Potter *et al.* aimed to compare the efficacy, post 4 weeks of treatment, with OD levocetirizine 5 mg and desloratadine 5 mg, in CIU patients. The levocetirizine group showed significant alleviation of pruritus severity as opposed to the desloratadine group, post-1st week ($P < 0.001$) and 4-week treatment periods ($P = 0.004$). Patients experienced more satisfaction with levocetirizine after 1 and 4 weeks of treatment ($P = 0.012$ and 0.021 , respectively), in comparison to desloratadine. Thus, levocetirizine 5 mg was significantly more efficient than desloratadine 5 mg in improving the CIU symptoms and providing patient relief.^[9]

CONCLUSION

Understanding the pathology of urticaria reveals its effects on patient well-being and provides insight into its treatment rationale. Second-generation H1-antihistamines, especially levocetirizine, are efficient for providing rapid and sustained relief, manifesting strong therapeutic potency and optimal clinical outcomes.

ACKNOWLEDGMENT

We would like to acknowledge Scientimed Solutions Pvt. Ltd. for assistance in developing the manuscript.

EXPERT OPINIONS

1. Dr. Kamal Lahoti, MD, DVL

Dr. Lahoti's Skin, Hair and Laser Clinic, Karimnagar, Telangana

Levocetirizine exhibits better efficacy in managing urticaria, compared to other antihistamines. It scores 5/5 for 24-h relief while fexofenadine scores 4 and bilastine scores 3. Guidelines recommend using second-generation H1-antihistamine as the first-line treatment for urticaria and allow its up dosing up to four-fold if the standard dose is ineffective. Regular medication is vital for CU; simultaneous use of different H1-antihistamines is discouraged.

2. Dr. Nikhil Kajale, MBBS, DDVL

Sparsh Skin Clinic, Nashik, Maharashtra

Levocetirizine scores 4/5 for long-lasting relief while fexofenadine scores 1 and bilastine a 2. The latest guidelines recommend second-generation H1-antihistamine drugs as

the first-line treatment for urticaria and allow its up dosing up to four-fold in cases unresponsive to the standard dose. Guidelines discourage the simultaneous use of different H1-antihistamines. Despite sedation, levocetirizine improves the patient's quality of life.

3. Dr. Padmavathi Surapaneni, MBBS, MD (Dermatology)

Pragna Skin, Laser and Cosmetic Clinic, Hyderabad, Telangana

I prescribe levocetirizine at night to optimize its sedative effects. For 24-h relief, levocetirizine scores 5/5, and fexofenadine and bilastine score 3/5. I recommend second-generation H1-antihistamine as the first-line treatment for urticaria and suggest up dosing up to four-fold in severe allergic dermatitis, atopic dermatitis, and chronic unresponsive cases. Strict adherence to treatment is vital, and I discourage combining different H1-antihistamines.

4. Dr. Syeda Nikhat, MBBS, DVD

Skin Care Centre, Hyderabad, Telangana

Levocetirizine is an efficient medication for managing urticaria. For 24-h relief, levocetirizine is rated as 2/5, fexofenadine as 4/5, and bilastine as 3/5. The latest guidelines suggest against using different H1-antihistamines concomitantly. I perform four-fold up dosing of the levocetirizine in cases of CU, pruritus due to systemic causes, and pruritic urticarial papules and plaques of pregnancy (PUPPP). Levocetirizine is effective, despite mild drowsiness and dullness.

5. Dr. Sudesh Jale, MBBS, DVD

Life Care Hospital, Rohtak, Haryana

Levocetirizine effectively manages urticaria, with minimal disruption to routine life. For 24-h relief, levocetirizine scores 5/5, fexofenadine 4/5, and bilastine 1/5. I adhere to the guidelines while prescribing antihistamines for managing urticaria.

6. Dr. Sanjeev Patil, MBBS, DVD

Skin Shine Clinic, Bijapur, Karnataka

Levocetirizine is effective in controlling urticaria and other allergic dermatological conditions. I rate levocetirizine and bilastine as 5/5 and fexofenadine as 4/5 for providing 24-h relief. The current guidelines allow up dosing of second-generation antihistamines up to four-fold in CU patients unresponsive to the standard dose. Levocetirizine exhibits a good clinical outcome without disturbing the patient's well-being.

7. Dr. S.r. Sathya, MBBS, DDVL

Shakti Skin Clinic, Chennai, Tamil Nadu

Levocetirizine demonstrates superiority and additional anti-inflammatory effects over fexofenadine and bilastine. Levocetirizine and bilastine are rated as 4/5 for providing 24-h relief, whereas fexofenadine scores 3/5. Second-generation antihistamines are recommended as the first-line treatment for managing urticaria. The concurrent use of different H1-antihistamines is discouraged and up dosing of second-generation H1-antihistamines up to 4 times is recommended in patients unresponsive to the standard dose.

8. Dr. S. Adikrishnan, MBBS, DD

Adi's Skin Clinic, Chennai, Tamil Nadu

For 24-h relief, levocetirizine scores 4/5 and fexofenadine and bilastine score 3/5. Recent guidelines recommend second-generation H1-antihistamines as first-line for urticaria, discourage concurrent use of H1-antihistamines, and advise up to four-fold up dosing for unresponsive cases, including atopic or resistant urticaria.

9. Dr. D. Dharani, MBBS, MD-DVL

Dr. Dharani's Skin Specialty Clinic, Hosur, Tamil Nadu

I prefer levocetirizine as the first line of treatment for urticaria and other allergic skin conditions such as atopic dermatitis, eczema, and airborne contact dermatitis. It exhibits less sedation, good safety, and better tolerance in chronic skin conditions, making it a favorable choice among antihistamines. For 24-h relief, levocetirizine scores 3/5 and fexofenadine 5/5.

10. Dr. Harsha S., MMBS, MD, FRGUHS

Ziva-Skin and Hair Clinic, Bangalore, Karnataka

Levocetirizine is an efficient antihistamine for treating urticaria and allergic skin conditions. I rate levocetirizine as 5/5 for long-lasting relief, while fexofenadine and bilastine earn 4. I abide by the guidelines for managing CU effectively. Levocetirizine demonstrates clinical benefits and improves patient well-being.

11. Dr. Adinath Bhandarker, MBBS, DVD

Vani Clinic, Shimoga, Karnataka

Levocetirizine exhibits better efficacy than other antihistamines. I will rate levocetirizine as 5/5 for 24-h long-lasting relief, while fexofenadine and bilastine score 2/5. The latest guidelines recommend up dosing of second-generation H1-antihistamines up to four-fold in CU patients, unresponsive to the standard dose, before considering any other treatment.

12. Dr. Shivakumar Patil, MD, Dermatologist

Ashwini Medical Center, Belgaum, Karnataka

Levocetirizine does not disturb the patient's routine and efficiently treats acute urticaria, similar to fexofenadine and bilastine. Levocetirizine, fexofenadine, and bilastine score 4/5 for providing 24-h relief. As per the guidelines, I prescribe second-generation H1-antihistamines as the first-line treatment and abide by the guidelines for effectively managing urticaria.

13. Dr. Penumatsa Radha, MBBS, MD, DVL

Veda Skin Clinic, Hyderabad, Telangana

I rate levocetirizine as 5/5, fexofenadine as 3/5, and bilastine as 4/5 for long-lasting relief. I prefer following the current guidelines for effectively treating patients with urticaria. Levocetirizine demonstrates good safety and tolerability.

14. Dr. Fatima U. Hasnath, MBBS, DDVL

Revive skin hair cosmetics and laser clinic, Hyderabad, Telangana

Levocetirizine exhibits superior efficacy to fexofenadine and bilastine in treating urticaria and other allergic dermatological conditions. For 24-h relief, I rate levocetirizine as 4/5, fexofenadine as 5/5, and bilastine as 3/5. Guidelines recommend Second-generation H1-antihistamines as first-line for urticaria, discourage concurrent prescriptions, and advise up to four-fold up dosing for unresponsive cases.

15. Dr. Punit Pratap, MD (Skin, VD And Leporology)

Dermanext: Skin hair and laser clinic, Noida, UP

Levocetirizine exhibits an early onset of action and a good half-life. For long-lasting relief, I will rate levocetirizine as 4/5, and fexofenadine and bilastine as 3/5. Guidelines recommend using second-generation H1-antihistamines as the first-line treatment for urticaria and are against the concurrent prescription of different H1-antihistamines. It also suggests four-fold up dosing of second-generation H1-antihistamines when standard dose is ineffective.

16. Dr. Kanchan Srivastava, MBBS, MD, DCD, PGDPD

The Doctor's Arena, Konark Hospital, Lucknow, Uttar Pradesh

Levocetirizine scores 5/5, fexofenadine scores 3, and bilastine scores 2 for 24-h relief. The current guidelines recommend, employing second-generation H1-antihistamines as first-line treatment for managing

urticaria, encouraging regular adherence to the treatment, and discouraging the concomitant use of various H1-antihistamines. In non-responsive CU, up dosing of second-generation H1-antihistamines up to 4 times is recommended.

17. Dr. N. Venkata Butchi Rama Rao, MD, DERMA FICC

Neeraja Clinic, Bhimavaram, Andhra Pradesh

Levocetirizine demonstrates good efficacy and therapeutic outcomes in treating urticaria. I rate levocetirizine as 5/5, and fexofenadine and bilastine as 3/5 for relief up to 24 h. I adhere to the latest guidelines for effectively treating patients with urticaria.

18. Dr. Mahendra V. Nagargoje, MBBS, MD

MD Skin Clinic, Pune, Maharashtra

For 24-h relief, levocetirizine scored 5/5, whereas fexofenadine and bilastine scored 4/5. The second-generation H1-antihistamines should be used as first-line treatment for urticaria. Simultaneous use of multiple H1-antihistamines is discouraged. In CU cases, unresponsive to the standard dose or 5 mg dose in the initial 12 h, up dosing of second-generation H1-antihistamines up to four-fold is recommended.

19. Dr. Vijayaraghavan, MD, DVD

Dr. Nair's Hospital, Kollam, Kerala

Levocetirizine scores 4/5, and fexofenadine and bilastine score 3/5 for 24-h long-lasting relief. As a first-line treatment for urticaria, I prefer using second-generation H1-antihistamines and adhering to the latest guidelines for effective therapy and beneficial outcomes.

20. Dr Radhika Khambati, MD Dermatologist

Nirmit Skin Clinic, Mumbai, Maharashtra

For providing relief for 24 h, levocetirizine scores 5/5 and fexofenadine 3/5. It is well-tolerated in patients experiencing mild sedative effects. It can be safely used in children, geriatric patients, and pregnant women. Patient compliance is good with levocetirizine as the OD dose is enough to give relief. It improves the quality of life of patients suffering from pruritus.

21. Dr. Archana Saxena, MD (DERMA)

Dr. Archana's Skin Clinic, Jaipur, Rajasthan

For 24-h long-lasting relief, I rate levocetirizine and fexofenadine as 5/5 and bilastine as 4/5. I prefer up dosing of Second-generation H1-antihistamines up to 4 times

before considering alternative second-line therapies in patients unresponsive to the standard dose. While levocetirizine might cause minor sedation, it is a beneficial drug that enhances patients' quality of life.

22. Dr. Rustom Chinwalla, DNB

Skintrix, Mumbai, Maharashtra

I find levocetirizine to be very efficacious and superior to fexofenadine and bilastine. For providing 24-h relief, I will rate levocetirizine and bilastine as 4/5 and fexofenadine as 5/5. For effective management of urticaria, I follow the treatment protocol suggested by the current guidelines.

23. Dr. Vishakha Mhatre, MBBS, DDV

Aashirwad Clinic, Panvel, Maharashtra

For long-lasting relief, levocetirizine and bilastine score 5/5, and fexofenadine score 2/5. For effective management of urticaria, I abide by the current guidelines and prefer up dosing in conditions such as psoriasis, chronic eczema, lichen planus (LP), pemphigus vulgaris (PV), or unresponsiveness to the standard dose.

24. Dr. Sudhir Bakshi, MBBS, DVD

Dr. Sudhir Bakshi Skin Clinic, Satara, Maharashtra

Levocetirizine demonstrates superior efficacy to other antihistamines. For long-lasting relief, I rate levocetirizine as 5/5, bilastine as 4, and fexofenadine as 3. I prefer second-generation H1-antihistamines as the first-line treatment for urticaria and advise regular adherence to the treatment. In patients unresponsive to the standard dose or aged 50–60 years, the dose is increased up to four-fold as a second-line treatment.

25. Dr. Harshverdhan Singh, MBBS, MD, SKIN VD

District Hospital Sheoganj (Sirohi), Sumerpur, Rajasthan

Levocetirizine is a safe and effective medication for managing urticaria and other allergic skin diseases. For providing 24-h relief, I would rate levocetirizine as 4/5, fexofenadine as 3/5, and bilastine as 1/5. Following the latest guidelines, for the immediate second-line treatment, I increase the dose of second-generation antihistamines up to 4 times in CU patients, unresponsive to the standard dose.

26. Dr. Sathyananda, MBBS, DVD

Cosmo Skin Clinic, Siddhaganga extension, Tumakuru, Karnataka

For 24-h relief, I rate levocetirizine as 5/5, fexofenadine as 3/5, and bilastine as 4/5. I ensure the effective management

of urticaria by strictly following the current guidelines. Despite the drowsiness, levocetirizine demonstrates superiority over other antihistamines.

27. Dr. Sunil M. Shah, MD

Shreeji Clinic, Ahmedabad, Gujarat

Levocetirizine should be the first-line therapy for urticaria and other allergic dermatological conditions. For long-lasting relief, I rate levocetirizine as 5/5, fexofenadine as 4, and bilastine as 2. The latest guidelines recommend the second-generation of antihistamines as the first-line treatment for urticaria, with up dosing up to four-fold in cases of unresponsive chronic or uncontrolled urticaria.

28. Dr. Rameshchandra D. Joshi, MD

Hardik Skin Clinic, Anand, Gujarat

Levocetirizine is my first choice of treatment for urticaria. I rate levocetirizine, fexofenadine, and bilastine as 5/5 for 24-h relief. The latest guidelines suggest using second-generation H1-antihistamines as the first-line treatment for urticaria with up dosing up to four-fold, if the standard dose is ineffective.

29. Dr. J. Navneen Joysingh, MBBS, DD

Clinic, Madurai, Tamil Nadu

Levocetirizine effectively treats urticaria and enhances the quality of life in patients. Levocetirizine scores 5/5 whereas fexofenadine scores 3 and bilastine a 4 for 24-h long-lasting relief. My preferred second-line treatment is the up dosing of second-generation H1-antihistamines up to 4 times the standard dose in patients of CU who do not respond to standard dosing.

30. Dr. Sandeep Buddhadeo, M. DERM., DVD

Disha Skin and Laser Institute, Maharashtra

Levocetirizine gives quick and long-lasting relief in urticaria and is superior to other antihistamines. For 24-h relief, levocetirizine scores 5/5 whereas fexofenadine scores 3/5. This drug shows good patient compliance except for a few complaints of sedation and constipation. I avoid prescribing it to cardiac patients.

31. Dr. Priya K.s., MBBS, MD, FRGUHS (Dermatosurgeon)

Derma Heal Clinic, Bengaluru, Karnataka

Levocetirizine scores 4/5 for 24-h relief compared to fexofenadine and bilastine which score 2/5 and 3/5, respectively. I treat my patients experiencing troublesome

symptoms of urticaria by following the treatment protocol mentioned in the latest guidelines.

32. Dr. Lipy Gupta, MD

Dr. Lipy Gupta Clinic, Delhi

Levocetirizine shows quick onset, long-lasting action, and very low inter-subject variability. For 24-h relief, levocetirizine scored 5/5, whereas fexofenadine and bilastine scored 4/5 and 2/5, respectively. I follow the latest guidelines for prescribing optimal treatment to patients with urticaria.

33. Dr. Ravindra Babu P., MBBS, DDVL (DNB)

Raga's Skin Care, Bangalore, Karnataka

For 24-h relief, I rate levocetirizine as 4/5, fexofenadine as 2/5, and bilastine as 3/5. I recommend second-generation H1-antihistamines as first-line treatment, for CU. Simultaneous use of different H1-antihistamines should be discouraged. For patients with chronic or uncontrolled urticaria or lichen simplex chronicus, unresponsive to standard doses, up dosing by 4 times should be the preferred second-line treatment.

34. Dr. Shireesha D., MBBS, DDVL

Shri Arogya Hospital and Laser Esthetic Arena, Sindhanur, Karnataka

Levocetirizine is more effective for short-term use. I will rate levocetirizine as 5/5, fexofenadine, and bilastine as 3/5 for 24-h relief. I adhere to current guidelines and prefer to increase the dose of second-generation H1-antihistamines up to 4 times if the standard dose is ineffective. Despite its efficacy, it might alter routine work due to its sedative effect.

35. Dr. Pravesh Valecha, MD (Dermatology)

Dr. Valecha's Skin and Laser Clinic, Udaipur, Rajasthan

Levocetirizine 10 mg is effective as a night time monotherapy but also demonstrates sedative effects. For 24-h relief, I rate levocetirizine and fexofenadine as 4/5 while bilastine scores 3/5. I prefer second-generation H1-antihistamines for treating urticaria and perform up dosing of second-generation H1-antihistamines in patients unresponsive to the standard dose or suffering from allergic rhinitis or food allergies.

36. Dr. Gharib Dawani, MBBS, DVD

Dawani's Skin Clinic, Indore, Madhya Pradesh

For 24-h relief, I rate levocetirizine as 4/5, fexofenadine as 5/5, and bilastine as 4/5. The latest guidelines recommend second-generation H1-antihistamine as the first-line treatment for urticaria, with up dosing up to four-fold

in patients with eczema, pruritus, and those who are unresponsive to the standard dose. I avoid prescribing different H1-antihistamines simultaneously.

37. Dr. Prafull Mehta, MD (Skin and VD)

Prafull Mehta Skin and Laser Center, Jodhpur, Rajasthan

For 24-h long-lasting relief, I rate levocetirizine as 4/5, and fexofenadine and bilastine as 2/5. Following the latest guidelines, I prefer the up dosing of second-generation H1-antihistamines up to four-fold, if the standard dose is ineffective.

38. Dr. M Chinnasamy, MBBS, MD, DVL

ADC Skin Hospital, Ariyalur, Tamil Nadu

For 24-h relief, levocetirizine scores 5/5, fexofenadine scores 1/5, and bilastine scores 2/5. Guidelines suggest using second-generation H1-antihistamines as the first-line treatment for urticaria and recommend that the dose of second-generation H1-antihistamines be increased up to four-fold in unresponsive CU cases, while concurrent prescription of various H1-antihistamines should be avoided.

39. Dr. Moiz F. Mithailwal, MD (Skin AND V.D.)

Raj Skin Clinic, Jamnagar, Gujarat

Levocetirizine is better than fexofenadine and bilastine, despite rare side effects such as sedation and constipation. For 24-h relief, levocetirizine and bilastine score 4/5 and fexofenadine score 3/5. I adhere to the current guidelines to prescribe an optimized treatment regimen for patients with urticaria.

40. Dr. Arun J. Vaidya, MD (Skin)

Advait Clinic, Ahmednagar, Maharashtra

For long-lasting relief, levocetirizine, fexofenadine, and bilastine score 3/5. The guidelines recommend increasing the dose up to 4 times in unresponsive CU patients and advising them to adhere to the treatment.

41. Dr. Aliya Palmeira, MBBS, DVD

Remanso Hospital, Mapusa, Goa

For 24-h relief, I rate levocetirizine as 5/5 and fexofenadine and bilastine as 4/5. As per the guidelines, second-generation H1-antihistamines should be the first-line treatment, and up dosing up to four-fold is recommended if the standard dose is ineffective. Concurrent use of different H1-antihistamines should be avoided. Levocetirizine offers excellent clinical outcomes, despite side effects such as sedation, increased hunger, and irritability.

42. Dr. Chetan Mehta, MBBS, Diploma in Dermatology and Venereology

Dr. Chetan Mehta's Total Skin and Hair Clinic Mumbai, Maharashtra

Levocetirizine shows superior efficacy and utility than fexofenadine. Levocetirizine scores 5/5, fexofenadine scores 2/5, and bilastine scores 3/5 for 24-h relief. I abide by the current guidelines for effectively treating patients with CU. Levocetirizine does not adversely impact the patient's routine life and is a safe choice.

43. Dr. Atulkumar Chaudhari, MBBS, MD, DVD (Skin)

Sparsh The divine touch, Deesa, Gujarat

My clinical experience with levocetirizine for managing urticaria is highly satisfactory. For 24-h relief, I rate levocetirizine as 5/5, fexofenadine as 3/5, and bilastine as 2/5. I follow the latest guidelines and prescribe second-generation H1-antihistamines as the first-line treatment for all types of urticaria. I advocate up dosing with second-generation antihistamines in urticaria patients.

44. Dr. Kette Rethvi Tej, MD, DNB, FRGUHS

Dr. Rethvi's Skin Space, Bengaluru, Karnataka

Levocetirizine is a good drug despite the drowsiness observed in some cases. I rate levocetirizine and fexofenadine as 4/5 and bilastine as 3/5 for long-lasting relief. I abide by the current guidelines to prescribe an appropriate treatment course for patients with urticaria.

45. Dr. C.m. Srividhya, MD (DERM)

Deepak Raveen Skin Clinic, Chennai, Tamil Nadu

I rate levocetirizine as 4/5, fexofenadine as 3/5, and bilastine as 2/5 for 24-h long-lasting relief. The recent guidelines advise using second-generation H1-antihistamines as the primary treatment for urticaria, with up dosing up to four-fold in CU cases if the standard dose is ineffective.

46. Dr. Akshay N. Tolani, MBBS, MD (Skin)

Esha Derma Care, Nagpur, Maharashtra

Levocetirizine surpasses fexofenadine and bilastine in terms of efficacy. Levocetirizine scores 4/5 whereas fexofenadine and bilastine score 3/5 for 24-h relief. As per the guidelines, second-generation H1-antihistamines should be used as the first-line treatment for urticaria. As a preferable second-line treatment, up dosing up to 4 times can be performed in resistant or persistent cases of CU.

47. Dr. Supratim Karmakar, MBBS, MD (DVL)

Wizderm, Jodhpur Park, Kolkata, West Bengal

Levocetirizine is an excellent treatment option and exhibits lesser chances of relapse. I rate it as 5/5 for 24-h relief, while fexofenadine scores 4/5 and bilastine scores 3/5. The current guidelines recommend up dosing of second-generation H1-antihistamines up to 4 times as a preferred second-line treatment in unresponsive CU cases.

48. Dr. Hari Kishan Kumar Y., MD, DVL

Dr. Kishan's Skin Care and Esthetic Research Center, Bangalore, Karnataka

For 24-h relief, I rate levocetirizine as 4/5 and fexofenadine and bilastine as 3/5. I prefer treating urticaria with second-generation H1-antihistamines and I advise my patients on adherence to the treatment. I perform up dosing of second-generation H1-antihistamines in unresponsive CU cases or in cases where itch or hives aggravate or persist. I do not prescribe different H1-antihistamines simultaneously.

49. Dr. Deepika Lunawat, MD (DVL)

Mahi Clinic, Chennai, Tamil Nadu

Levocetirizine if employed at night time is effective in sleep-disturbed urticaria. For sustained 24-h relief, I rate levocetirizine as 5/5 and fexofenadine and bilastine as 4/5. Following current guidelines, I prescribe an optimized treatment regimen for patients with urticarial.

50. Dr. Radhakrishnan K.B., MBBS, MD, DVD

Dr. RK's Skin and Esthetic Center, Palakkad, Kerala

Levocetirizine is a drug of choice for dermatologists in managing urticaria and other skin conditions. For 24-h relief, I will rate levocetirizine as 4/5, and fexofenadine and bilastine as 2/5. I adhere to the latest guidelines and implement up dosing up to four-fold in CU patients who do not respond to the standard dose.

51. Dr. Nidhi Gupta, MD, DERMATOLOGY

Dr Gupta's Skin Hair Laser and Esthetic Center, Panchkula, Haryana

Levocetirizine scores 4/5 whereas, fexofenadine and bilastine score 3/5, for 24-h relief. Levocetirizine might exert a mild sedative effect but overall patients adapt to it well. I abide by the latest guidelines for effectively treating patients with urticaria.

52. Dr. Kaveri Thapa, MBBS, MD

STNM Hospital, Gangtok, Sikkim

Patients find levocetirizine effective, despite the mild morning drowsiness. For 24-h relief, I rate levocetirizine

as 5/5, and fexofenadine and bilastine as 4/5. Following the latest guidelines, I can treat urticaria patients effectively and achieve beneficial therapeutic outcomes.

53. Dr. Jogesh Das, MBBS, MD

Clinic, Guwahati, Assam

Levocetirizine is the best treatment for urticaria and shows better efficacy than fexofenadine and bilastine. I rate levocetirizine and bilastine as 4/5, and fexofenadine as 3/5 for 24-h relief. Following the latest guidelines, I prefer up dosing of second-generation H1-antihistamines up to four-fold in unresponsive CU patients.

54. Dr. Tanupriya Hajra, Consultant Dermatologist

Jyotirmoyee Diabetes Center, Howrah, West Bengal

For sustained 24-h relief, I rate levocetirizine as 4/5, fexofenadine as 2/5, and bilastine as 1/5. Second-generation H1-antihistamines are recommended as the primary treatment for urticaria and up dosing of these antihistamines up to four-fold is recommended for patients unresponsive to the standard dose or in patients showing acute onset.

55. Dr. S. Vijaya Kumar, MBBS, DDVL

Srishti Skin and Hair Clinic, Porur, Chennai, Tamil Nadu

Levocetirizine scores 4/5 for 24-h relief whereas fexofenadine scores 3/5 and bilastine scores 2/5. My first-line treatment for urticaria is second-generation H1-antihistamines and I suggest adherence to the treatment for effective results. I prefer up dosing of second-generation H1-antihistamines up to 4 times and avoid prescribing different H1-antihistamines simultaneously.

56. Dr. Praveen Bhaskaran, MBBS, MD

Marwa Clinic, Kuttippuram, Kerala

For 24-h relief, I will rate levocetirizine as 4/5, fexofenadine as 5/5, and bilastine as 3/5. I prefer second-generation H1-antihistamines as first-line treatment for urticaria and advise patients to adhere to the medication course. If the standard dose is ineffective, I increase the dose of second-generation H1-antihistamines up to four-fold, and avoid prescribing different H1-antihistamines simultaneously.

57. Dr. A. Selvam, MBBS, MD, Dermatologist

AKI, Skin Care Clinic, Tirunelveli, Tamil Nadu

For 24-h relief, I will rate levocetirizine as 5/5 and fexofenadine and bilastine as 3/5. I perform up dosing of second-generation H1-antihistamines up to four-fold, in CU

cases, unresponsive to the standard dose. Levocetirizine is better compared to other second-generation antihistamines.

58. Dr. Manjula Nagaraj, MBBS, DD, MD, Dermatology

Skin Care Clinic, Erode, Tamil Nadu

For 24-h relief, I rate levocetirizine as 5/5 and fexofenadine and bilastine as 3/5. The latest guideline recommends second-generation H1-antihistamine for the first-line treatment of urticaria and suggests up dosing up to four-fold, as a second-line treatment in CU patients unresponsive to the standard dose or in patients with itchy disorders.

59. Dr. John Medhi, MD

Skin Care, Guwahati, Assam

Levocetirizine is the first line of treatment in urticaria. I rate levocetirizine and bilastine as 4/5 for 24-h long-lasting relief, and fexofenadine as 3/5. The latest guidelines recommend up dosing of second-generation H1-antihistamines up to 4 times as a preferred second-line approach in CU when the standard dose is ineffective.

60. Dr. Nima Teresa Andrew, DDVL, MD, DNB, MRCP

Jubilee Mission Medical College, Trichur, Kerala

Levocetirizine is an effective treatment for both mild and CU. For 24-h relief, I rate levocetirizine as 5/5, and fexofenadine and bilastine as 3/5. Following the latest guidelines, I increase the dose of second-generation H1-antihistamines up to four-fold in CU patients who are unresponsive to the standard dose.

61. Dr. Sheeba Grace Raakesh Prasad, MD, DD

SP Derma Centre, Madurai, Tamil Nadu

My clinical experience with levocetirizine is good. I rate levocetirizine as 5/5 for 24-h relief, whereas fexofenadine and bilastine score 3. In CU patients unresponsive to the standard dose, I prefer increasing the dose of second-generation H1-antihistamines up to four-fold.

62. Dr. Prashanthi Rajendran, MBBS, MD, DVL

Tagore Medical College and Annai Arul Hospital, Chennai Tamil Nadu

Levocetirizine is an effective treatment starting at a dose of 10 mg and then tapering down to 5 mg. For providing relief for 24 h, I would give a rating of 4/5 to levocetirizine, fexofenadine, and bilastine. The current guidelines recommend the up dosing of second-generation

H1-antihistamine, 4 times if the standard dose is ineffective. The medical benefits of levocetirizine outweigh its rare sedative effect.

63. Dr. Megha Agrawal, MBBS, MD (Dermatology)

Laser Skin Clinic, Darbhanga, Bihar

I rate levocetirizine as 4/5 for 24-h relief, and bilastine and fexofenadine as 3/5. I prefer up dosing second-generation H1-antihistamines up to four-fold, as second-line treatment in patients with CU unresponsive to the standard dose or who have resistant or recurrent conditions.

64. Dr. Anurag Mathur, MBBS, DVD

Kiran Memorial Skin Care Clinic, Meerut, Uttar Pradesh

I rate levocetirizine as 5/5, and fexofenadine and bilastine as 3/5 for 24-h relief. My first-line treatment for urticaria is second-generation H1-antihistamines. While treating patients with eczema, psoriasis, or CU who are unresponsive to the standard dose, my preferred second-line treatment is increasing the dosing 4 times the standard dose. I avoid concurrent prescriptions of different H1-antihistamines.

65. Dr. Smitha Murali, MBBS, DCH, MD, DVL

Taluk Hospital, Kunnankulam, Thrissur, Kerala

For 24-h long-lasting relief, I rate levocetirizine and bilastine as 4/5 and fexofenadine as 3/5. I avoid prescribing different H1-antihistamines simultaneously. Second-generation H1-antihistamines are my first-line choice for urticaria. For patients with CU who do not respond to the standard dose, I prefer up dosing up to four-fold as a second-line treatment.

66. Dr. Puneet Sharma, MD, Dermatologist

Mahadevi Clinic, Dhar, Madhya Pradesh

Levocetirizine shows no adverse effect apart from mild sedation observed in around 10% of the patients. Levocetirizine and fexofenadine score 4/5 for providing relief for up to 24 h whereas bilastine scores 2/5. The latest guidelines strongly suggest up dosing of second-generation H1-antihistamine up to four-fold in patients with CU who are unresponsive to the conventional dose.

67. Dr. Partha Pratim Sarkar, MBBS

Clinic, Cossipore Road, Kolkata, West Bengal

For 24-h relief, I rate levocetirizine and bilastine as 4/5 and fexofenadine as 3/5. I abide by the treatment plan suggested by the current guidelines for the efficient management of urticaria.

REFERENCES

1. Zuberbier T, Abdul Latiff AH, Abuzakouk M, Aquilina S, Asero R, Baker D, *et al.* The international EAACI/GA²LEN/EuroGuiDerm/APAAACI guideline for the definition, classification, diagnosis, and management of urticaria. *Allergy* 2022;77:734-66.
2. Ortonne JP. Urticaria and its subtypes: The role of second-generation antihistamines. *Eur J Intern Med* 2012;23:26-30.
3. Kavosh ER, Khan DA. Second-generation H 1-antihistamines in chronic urticaria: An evidence-based review. *Am J Clin Dermatol* 2011;12:361-76.
4. Fine LM, Bernstein JA. Guideline of chronic urticaria beyond. *Allergy Asthma Immunol Res* 2016;8:396-403.
5. Nettis E, Colanardi MC, Barra L, Ferrannini A, Vacca A, Tursi A. Levocetirizine in the treatment of chronic idiopathic urticaria: A randomized, double-blind, placebo-controlled study. *Br J Dermatol* 2006;154:533-8.
6. Tončić RJ, Lipozenčić J, Marinović B. Treatment of chronic urticaria. *Acta Dermatovenerol Croat* 2009;17:305-22.
7. Gillard M, Benedetti MS, Chatelain P, Baltes E. Histamine H1 receptor occupancy and pharmacodynamics of second-generation H1-antihistamines. *Inflamm Res* 2005;54:367-9.
8. Kapp A, Pichler WJ. Levocetirizine is an effective treatment in patients suffering from chronic idiopathic urticaria: A randomized, double-blind, placebo-controlled, parallel, multicenter study. *Int J Dermatol* 2006;45:469-74.
9. Potter PC, Kapp A, Maurer M, Guillet G, Jian AM, Hauptmann P, *et al.* Comparison of the efficacy of levocetirizine 5 mg and desloratadine 5 mg in chronic idiopathic urticaria patients. *Allergy* 2009;64:596-604.

How to cite this article: Kajale N, Jale S, Pratap P, Vijayaraghavan KP, Karmakar S, Dharani D. Clinical Insights: Evaluating the Efficacy of Levocetirizine in Treating Urticaria. *Int J Sci Stud* 2024;12(4):36-45.

Source of Support: Nil, **Conflicts of Interest:** None declared.