

Real World Experience: Bilastine and Urticaria

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Earlier this year, a real-world case project was published on the 2nd generation antihistamine bilastine (Blexten, Aralez Pharmaceuticals) and its' application in treating allergic conditions that require an antihistamine.

The following review is written by one of the authors of this paper, Dr. Lyn Guenther, with a focus on the treatment of urticaria, commonly referred to as hives, and a common presenting complaint in primary care.

Urticaria and Impact on Quality of Life

Urticaria, commonly referred to as hives, is a common occurrence in primary care practices given a lifetime prevalence of ~15-25%.^{1,2} Urticaria can be classified by duration (acute < 6 weeks or chronic ≥ 6 weeks)1.2 and by absence (spontaneous) or presence (inducible) of triggers such as pressure, cold, heat, exercise, vibration, or sun exposure.2 Patients can experience both spontaneous and inducible urticaria.² In up to 50% of chronic spontaneous urticaria (CSU) cases, angioedema is present with or without wheals.3 CSU has a significant impact on patients' quality of life with disruptions in home, work and school life.4.5 In a study of 142 patients with chronic urticaria, 56% of the 103 working patients had lost at least 1 day of work due to urticaria.6 Of the total study population, 63% suffered from anxiety and 46% worried that their disease would worsen.6 CU had a negative impact on patients' self-image and attitude towards others.6 Many felt less attractive, self-conscious and embarrassed.6

Marked sleep disruption was reported by 38% while an additional 54% had some interference with sleep.⁶

Guideline Treatment Recommendations

The Canadian Society of Allergy and Clinical Immunology (CSACI) recently published a position statement recommending that the use of 1st generation antihistamines (AH) such as diphenhydramine be discontinued and replaced with 2nd generation AHs for the treatment of urticaria. The recommendation against 1st generation AHs is based on their potential side effect profile including: sedation, impairment with decreased cognitive function, poor sleep quality, dizziness and orthostatic hypotension. The 2nd generation AHs are efficacious with an improved safety profile due to reduced sedating and anticholinergic effects.

Current international guidelines provide a treatment algorithm for urticaria and

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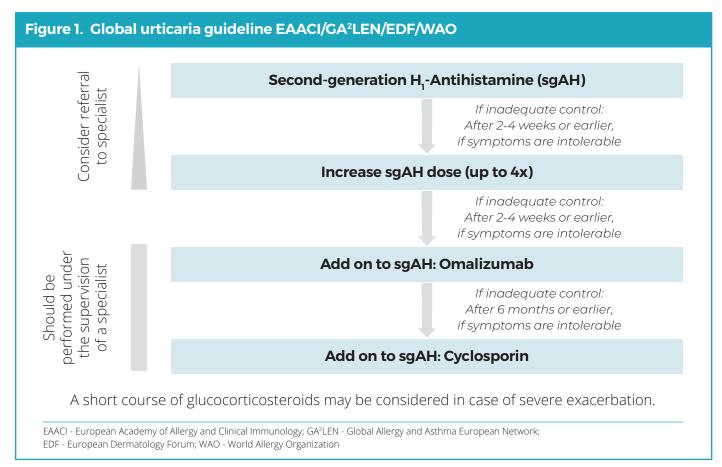
recommend initial treatment with a 2nd generation AH.³ If adequate control is not achieved after 2-4 weeks or symptoms are intolerable, increasing the dose of the AH is recommended (Figure 1). Once an additional medication is considered, such as omalizumab, referral to a specialist should be made.³

Case Studies with Bilastine

Bilastine was recently explored in real world cases by a panel of experts in Canada to manage both allergic rhinitis and urticaria.8

The results demonstrated patients achieving good symptom relief and tolerability over long periods.8

Bilastine is a 2nd generation antihistamine, available in Canada since 2017. Bilastine does not cross the blood-brain barrier, is not metabolized and does not interact with the cytochrome P450 system.⁹ Bilastine can be prescribed without adjustments to patients with both renal and liver impairment. In clinical trials, the rate of somnolence with bilastine was 4.4%, equivalent to patients using placebo.⁹



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32-year-old woman with 6-month history of itchy red urticarial papules. The itch often woke her up at night. She could not identify any triggers. She tried Benadryl 25 mg -100 mg¹⁻⁴ at bedtime with some improvement of itch and sleep, but developed a dry

mouth and found it hard to wake up in the morning and concentrate at work. She was in otherwise good health and on no routine mediations.

Physical examination showed scattered red urticarial lesions with flares. Angioedema was not present, but symptomatic dermatographism could be elicited. (Figure 2)

She was switched to bilastine 20 mg at bedtime. After 1 week, she was less itchy with fewer hives. After 2 weeks, the dose was increased to 40 mg at bedtime and her urticarial lesions, dermatographism and pruritus resolved. She did not have any somnolence, dry mouth or difficulty concentrating while on bilastine, even with the higher dose.

Figure 2. Dermatographism elicited with a toothpick



Consideration to tapering of the antihistamine should be given if a patient has been lesion and symptom free for 2 weeks. If there is a flare, the previous dose should be given.

Comment:

This patient had chronic (lasting 6 or more weeks) spontaneous (no triggers) as well as inducible (symptomatic dermatographism) urticaria. Patients with urticaria should be assessed for dermatographism particularly since many of them, as in the case of this patient, are not aware that they have it.

She had anticholinergic adverse effects including dry mouth, sedation and inability to concentrate with the first generation antihistamine diphenhydramine (Benadryl®). Her urticarial lesions, itching and dermatographism cleared with twice the approved dose of a second-generation antihistamine, bilastine,

First generation antihistamines such as diphenhydramine should not be used to treat urticaria. They are associated with many adverse effects including dry mouth, sedation and inability to concentrate.⁷ Second generation antihistamines such as bilastine are much better tolerated. If control is not adequate with a once-daily second generation antihistamine, the dose can be increased up to 4 times.3 This patient only required a doubling of the dose for skin and symptom clearing.

A study in patients with cold contact urticaria showed increased efficacy (based on critical temperature thresholds) with two-fold and four-fold updosing of bilastine without sedation.¹⁰ In addition, a small crossover, randomized, double-blind, placebo-controlled study in healthy volunteers showed that the wheal and flare surface areas after histamine injection were inhibited significantly more with bilastine 20 mg than desloratadine 5 mg and rupatadine 10 mg. Bilastine also had the fastest onset of action.11



Summary

Urticaria is a condition most NPs in family practice are likely to encounter and presents significant concerns for patient's quality of life.^{4.5.8} Recent guidelines from the CSACI recommend against the use of 1st generation AHs (e.g. diphenhydramine) due to their significant side effect profile.⁷ The most recent international urticaria guidelines recommend initial treatment with 2nd generation AHs and increasing the dosage of a single 2nd generation AH before considering adjunct therapy.^{3.7} Real world cases with bilastine have demonstrated how patients with urticaria can be treated to provide relief and improved quality of life.^{3.8}

- Schaefer P. Acute and Chronic Urticaria: Evaluation and Treatment. Am Fam Physician, 2017;95(11):717-724.
- Kanani A, Betschel SD, Warrington R. Urticaria and angioedema. Allergy Asthma Clin Immunol, 2018;14(Suppl 2):59. Published 2018 Sep 12. doi:10.1186/s13223-018-0288-z
- Zuberbier T, Aberer W, Asero R, et al. The EAACI/GA(2)LEN/EDF/ WAO guideline for the definition, classification, diagnosis and management of urticaria. Allergy, 2018;73(7):1393-1414.
- Grob JJ, Revuz J, Ortonne JP, Auquier P, Lorette G. Comparative study of the impact of chronic urticaria, psoriasis and atopic dermatitis on the quality of life. British Journal of Dermatology, 2005 Feb;152(2):289-95.
- Engin B, Uguz F, Yilmaz E, Özdemir M, Mevlitoglu I. The levels of depression, anxiety and quality of life in patients with chronic idiopathic urticaria. Journal of the European Academy of Dermatology and Venereology, 2008 Jan;22(1):36-40.
- O'Donnell BF, Lawlor F, Simpson J, Morgan M, Greaves MW. The impact of chronic urticaria on the quality of life. Br J Dermatol, 1997;136:197-201.
- Fein, M.N., Fischer, D.A., O'Keefe, A.W. et al. CSACI position statement: Newer generation H₁-antihistamines are safer than first-generation H₁-antihistamines and should be the first-line antihistamines for the treatment of allergic rhinitis and urticaria. Allergy Asthma Clin Immunol 15, 61 (2019).



Real world cases with bilastine have demonstrated how patients with urticaria can be treated to provide relief and improved quality of life.^{3,8}

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- Lynde CW, Sussman G, Dion PL, Guenther L, Hébert J, Rao J, Leek TV, Waserman S. Multidisciplinary Real-World Experience With Bilastine, a Second Generation Antihistamine. Journal of Drugs in Dermatology: JDD, 2020 Feb 1;19(2):145-54.
- Aralez Pharmaceuticals Canada Inc., Blexten (bilastine) product monograph, December 2018.
- Krause K. Spohr A, Ziberboer T, Church MK, Maurer M. Up-dosing with bilastine results in improved effectiveness in cold contact urticaria. Allergy, 2013;68:921-928.
- Antonijoan R, Coimbra J, García-Gea C, Puntes M, Gich I, Campo C, Valiente R, Labeaga L. Comparative efficacy of bilastine, desloratadine, and rupatadine in the suppression of wheal and flare response induced by intradermal histamine in healthy volunteers. Current Medical Research and Opinion, 2017;33(1):129-136.