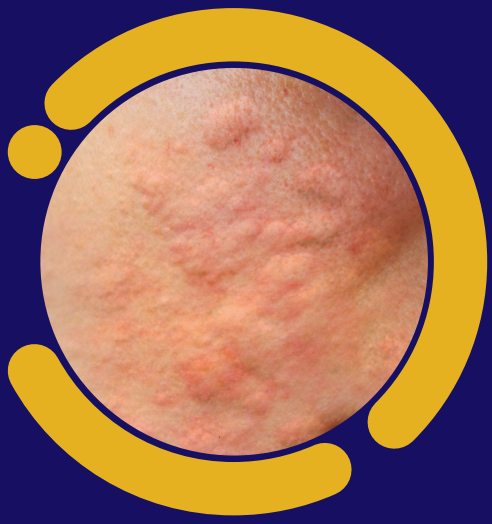
ISSUE 1

Bilastine
in moderate to severe
URTICARIA



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A case report of 25-year-old female with moderate to severe urticaria treated by updosing of bilastine

CASE PRESENTATION

- A 25-year-old female patient presented with complaint of facial itching, periorbital erythema and swelling involving the upper and lower lips since past two months
- She also added that she experienced mild nausea two days back.

PAST HISTORY

- She had a two-month history of urticaria with intermittent episodes of angioedema as told by her clinician
- Her family history was negative for any allergy
- She denied being allergic to any food or medication
- Her medical history was not significant.

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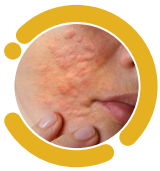


Bilastine in moderate to severe URTICARIA

PAST CLINICAL COURSE

- Within 30 minutes of her first episode of swelling, she developed widespread batches of red wheals which responded moderately to antihistamine
- The following day, she experienced a recurrence of the symptoms and continued to have almost daily symptoms of urticaria with intermittent episodes of angioedema
- She was therefore commenced on alternative anti-histamine but continued to develop the symptoms and experienced swellings of the hands and feet
- Her treatment was escalated to 10–20 mg of cetirizine. In addition, montelukast was commenced. However, she got no relief.

EXAMINATION

General examination

- On examination, she was afebrile
- Her vitals were within normal limits; pulse: 78/min, BP: 130/90 mmHg, respiratory rate: 20 breaths/min.

Local examination

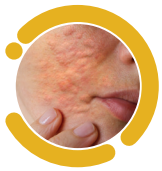
- There was marked erythema encircling her periorbital region extending on to cheeks
- 25-30 reddish elevated wheals with well-defined edges were seen scattered over her face and neck
- Her UAS7 score was 26
- Blanching was present.

DIAGNOSIS

Based on the above findings, she was diagnosed with moderate to severe urticaria.

MANAGEMENT

- Since she was not respondent to conventional dosing, her dosing was increased
- She was therefore prescribed 40 mg (an up-dose) of bilastine daily for 2 weeks
- On follow-up, her symptoms had started to subside
- Swelling subsided gradually over next few days and also erythema and itching were not present at her follow up after 20 days.



DISCUSSION

Overview

Urticaria, known to affect 15–25% of individuals is distinguished by recurrent, pruritic, wheals with pale, central swelling and surrounding epidermal erythema which can appear over any part of the body.[1] These wheals vary in size from 1 mm to many centimetres and are temporary resolving within 24 hours without scarring.[1,2] These are caused by vasoactive mediators, predominantly histamine, released from mast cells.[2] Furthermore, it has been reported that approximately 40% of patients with urticaria also experience angioedema.[1]

Depending on the duration of symptoms and the presence or absence of inducing stimuli, urticaria is classified into acute or chronic.[1]

Causative factors for urticaria include medications such as penicillin, sulfonamides, NSAIDS, opiates and narcotics, foods, viral infections, stress, parasitic infections, contact allergens (e.g., latex), psychogenic factors, systemic diseases, physical factors such as pressure, hot and cold.[3]

Management

Therapeutic modalities should aim at eliminating etiological and triggering factors associated with urticaria by administering antihistamines and corticosteroids.[1,3] Second-generation, non-sedating, non-impairing H1-receptor antihistamines (e.g., fexofenadine, desloratadine, loratadine, cetirizine, bilastine, rupatadine) are the cornerstone of urticaria management. Corticosteroids and immunomodulatory or immunosuppressive therapies can also be used in severe cases or in patients with poor response to antihistamines .[1]

Role of bilastine in urticaria

Bilastine, a H1-antihistamine is known to possess moderate-to-high affinity and potent activity at the histamine H1-receptor while having negligible affinity or effects at 30 other receptors. Evidences from preliminary clinical data had shown that bilastine is rapidly and effectively absorbed, undergoes negligible metabolism and is a substrate for P-glycoprotein, which limits its passage across the blood–brain barrier. Since bilastine has long duration of action, efficacy and freedom from central nervous system sedative effects make it a potentially attractive option for use in this clinical situation.[4]

However, it has been reported that in some patients, conventional dose of second generation antihistamines is ineffective in completely relieving symptoms as histamine concentrations reach a high level in the skin, due to its poor diffusibility in the dermis. In such patients, the EAACI/GALEN/EDF/WAO guidelines recommend increasing the dosage up to fourfold.[5]

Clinical evidence

A study[6] was done to evaluate the efficacy and safety of updosing of bilastine in patients with chronic spontaneous urticaria (CSU). It included 29 patients with CSU who had not responded to

conventional dosing of H1 antihistamines. Following a two -week baseline period, wherein bilastine 20 mg was administered, there were three treatment periods each of two weeks. During the first treatment period, all 29 patients took 20 mg bilastine orally each day. At the end of this period, all patients with a complete response (UAS7≤3) were discontinued from further analysis. The remaining 25 patients went on to the second treatment period during which they took 40 mg bilastine daily. Again, at the end of this period, all patients with UAS7≤ 3 were discontinued from further analysis and the remaining 22 patients went on to the third treatment period during which they took 80 mg bilastine daily. The results were:

- The mean UAS7 fell from a baseline value of 24.3 ± 1.5 to 15.3 ± 2.1 accounting to fall of 37% which was was highly significant (p< 0.001) after 2 weeks of 20 mg of bilastine
- Falls in the pruritus and wheal components were 44% and 29% respectively
- Updosing to 40 mg bilastine produced a further mean UAS7 fall from 18.7 ± 1.8 to 14.4 ± 1.5 accounting to 23% fall which was statistically significant (p=0.002)
- Falls in the pruritus and wheal components were 24% and 17% respectively
- After taking 40 mg bilastine for 2 weeks, there were no patients with severe disease activity (p<0.001 compared to 20 mg)
- Updosing to 80 mg bilastine produced a small fall in mean UAS7 from 16.7 ± 1.2 to 15.5 ± 1.4, which was not statistically significant
- Conclusively, bilastine is effective and well-tolerated in patients with CSU even at doses higher than the standard dosing regimen.

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