

## Chronic Idiopathic Urticaria

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**Overall Purpose/Goal:** To provide excellent reviews on key aspects of allergic disease to those who research, treat, or manage allergic disease.

**Target Audience:** Physicians and researchers within the field of allergic disease.

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claim credit commensurate with the extent of their participation in the activity.

**List of Design Committee Members:** Eveline Y. Wu, MD, and Sarbjit S. Saini, MD, FAAAAI

### Activity Objectives

#### Learning objectives:

1. To recognize the pertinent characteristics of chronic idiopathic urticaria.
2. To review the available treatment options for chronic idiopathic urticaria refractory to conventional treatment with antihistamines.
3. To discuss the efficacy and safety of omalizumab in the treatment of refractory chronic idiopathic urticaria.

**Recognition of Commercial Support:** This CME has not received external commercial support.

**Disclosure of Significant Relationships with Relevant Commercial Companies/Organizations:** S. Saini has received research support from AstraZeneca, Novartis, the National Institutes of Health/National Institute of Allergy and Infectious Diseases, and the Immune Tolerance Network; has received consultancy fees from Ono, Novartis, Genentech, and MedImmune; and receives royalties from UpToDate. E. Y. Wu declares no relevant conflicts of interest.

The Difficult Cases Feature is based on the *Difficult Cases Course* presented at the AAAAI Annual Meeting and coordinated by the AAAAI New Allergist-Immunologist Assembly (NAIA). View the entire presentation and obtain CME by visiting the JACI: In Practice homepage [www.jaci-inpractice.org](http://www.jaci-inpractice.org).

**Key words:** chronic urticaria; omalizumab; refractory

The patient is a 42-year-old woman who is referred for further evaluation and management of refractory chronic urticaria. She was in her usual state of good health until 6 months ago, when she started to develop recurrent episodes of hives. At the time of referral, she was experiencing hives almost daily and without identifiable triggers. The lesions were pruritic and often disrupted her sleep. The lesions did not leave residual bruising or

hyperpigmentation. She denied symptoms concerning for angioedema. Other than mild fatigue, she also denied other symptoms suggestive of systemic illness.

For several months, she had been treated with various combinations of H1 antihistamines with inadequate relief. On presentation, she was taking fexofenadine 360 mg every morning, cetirizine 20 mg every evening, and hydroxyzine 50 mg as needed for breakthrough episodes. She had previously taken several courses of oral prednisone with marked relief, but her hives recurred immediately each time after completion of therapy.

Her physical examination was notable only for urticarial lesions involving the forearms and trunk. She recently had a normal complete blood cell count with differential, chemistries, iron profile, and thyroid studies performed by her primary care provider for evaluation of fatigue. The patient was ultimately treated with omalizumab 300 mg subcutaneously every 4 weeks with rapid and complete resolution of her urticaria. At her 6-month follow-up, her symptoms were still quiescent while continuing omalizumab therapy.

Chronic idiopathic urticaria (CIU), also referred to as chronic spontaneous urticaria, is characterized by pruritic wheals that occur most days for at least 6 weeks and have no identifiable trigger. Approximately 40% of the affected individuals have concomitant angioedema.<sup>1</sup> About 55% of the patients with CIU

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are inadequately responsive or completely refractory to H1 antihistamines despite receiving them at up to 4 times higher than approved doses.<sup>2</sup> Recommended treatment options for patients refractory to H1 antihistamines include leukotriene-receptor antagonists, cyclosporine, hydroxychloroquine, dapsone, methotrexate, and sulfasalazine. Limited data exist, however, supporting the use of these agents in CIU. In addition, none has regulatory approval for the treatment of CIU.<sup>2</sup>

Omalizumab is a recombinant humanized anti-IgE mAb recently approved for the treatment of CIU. Three randomized, double-blind, and placebo-controlled trials have rigorously investigated the efficacy and safety of omalizumab in adults and adolescents with CIU refractory to H1 antihistamines.<sup>3-5</sup> Omalizumab significantly reduced disease activity and symptoms with a dose-response in efficacy and time to improvement. Overall, omalizumab was well tolerated with a low frequency of serious adverse events. The duration of therapy has not been thoroughly evaluated, though rebound of symptoms was observed with discontinuation of omalizumab therapy. Given its striking

efficacy and tolerability, early initiation of omalizumab in patients with refractory CIU should be considered.

Further information can be obtained by viewing the original Difficult Cases presentation in this article's Online Repository at [www.jaci-inpractice.org](http://www.jaci-inpractice.org).

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