

The Road to Better Urticaria and Angioedema Management



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Urticaria and angioedema are among the most common conditions evaluated by specialists in allergy and immunology and dermatology, but are perhaps also among the most poorly understood. Up to 20% of the general population will experience urticaria during their lifetime; chronic urticaria affects 1% of the population at any given time. Likewise, an estimated 10% to 20% of the population experience angioedema, and the overall prevalence of recurrent angioedema is estimated to be 0.5%. Yet, despite being relatively common, in clinical practice and across all age groups,¹ urticaria and angioedema are often poorly managed and frequently remain frustrating and debilitating for many affected patients. Challenges contributing to this include a long delay in diagnosis and high rates of misdiagnoses, insufficient knowledge of root causes, relevant triggers of exacerbation and aggravating factors, inadequate monitoring of recurrent disruptive signs and symptoms, and the use of ineffective therapies.

In this theme issue of the *Journal of Allergy and Clinical Immunology: In Practice*, we navigate these challenges along the diagnostic and therapeutic journey traveled by our patients with urticaria and angioedema (Figure 1). The path includes important landmarks: (1) symptom recognition and clinical evaluation; (2) identifying mechanisms and pathophysiology that may affect diagnostics and treatment; (3) recognition of individual factors that influence the course of the condition as well as our treatment plans; (4) management approaches including advances in therapy; and (5) longitudinal evaluation of the condition and treatment impact on patients' lives. This issue provides a collection of

articles authored by international experts spanning each of these important steps in the path to understanding and managing urticaria and angioedema.

When evaluating patients for urticaria and angioedema, a first important step is to start at the beginning, ensuring that the symptoms and clinical history are in fact consistent with these conditions. The signs and symptoms of urticaria and angioedema, pruritic wheals and transient swellings, are occasionally associated with other systemic conditions, which makes recognition of specific clinical clues critical for appropriate evaluation. In this issue, Peters et al² provide a valuable overview of mimics of urticaria and angioedema, discussing conditions that should be included in the initial differential diagnosis, particularly when atypical clinical features are present.

Once a diagnosis of urticaria or angioedema is clinically confirmed, the next common and understandable question from patients is: why? At times, this is a difficult question, because the underlying causes can be difficult to identify, and confirmatory tests and biomarkers are not readily available or missing. Also, the underlying mechanisms for urticaria and angioedema remain an area of considerable investigation, and important new insights on pathomechanisms and drivers of these conditions continue to emerge. Giménez-Arnau et al³ address the complex topic of the pathophysiology of chronic urticaria, dissecting the role of infiltrating cells as well cytokines and neuroinflammation, which may inform future therapeutic strategies. Angioedema is also frequently described as being of an unknown cause, and although it is often determined to be on the spectrum of chronic spontaneous urticaria, studies have identified an increasing number of genetic mutations associated with non-mast cell mediated hereditary angioedema.⁴ Lopes Veronez et al⁴ provide an update on this dynamic area of research, highlighting the increasing importance of genetics and genomics in our future diagnostic considerations.

Urticaria and angioedema symptoms are highly variable and often predictably unpredictable. In discussing these conditions with our patients, a common question related to the management plan is "What can I do to prevent these symptoms?" Because of the wide phenotypic variability, no easy answer exists. However, general advice and education are often helpful to improve understanding of factors or triggers that may influence the clinical course. Grumach et al⁵ effectively summarize the accumulated knowledge on triggers of urticaria and angioedema. Furthermore, the prominent effect of hormones in some individuals or conditions is a fascinating aspect of the pathophysiology of urticaria and angioedema; this topic is reviewed and explored in an article by Bernstein et al.⁶

Management strategies for urticaria and angioedema range from simple to complex, although certainly patients who seek specialist care have often exhausted simple options. Optimal

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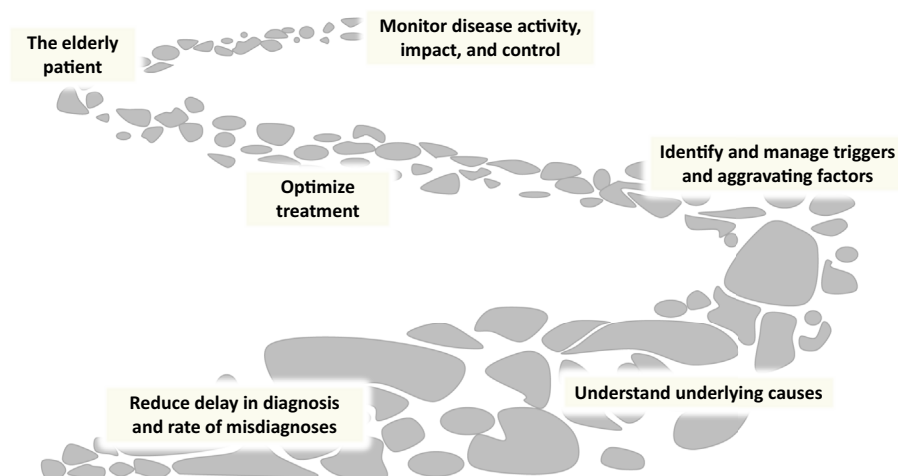


FIGURE 1. The road to better urticaria and angioedema management. Many challenges come with managing urticaria and angioedema in routine clinical practice. Knowledge of differential diagnoses,² underlying causes,^{3,4} triggers and aggravating factors,^{5,6} treatment options,⁷ special patient populations,⁸ and tools for monitoring disease activity, impact, and control⁹ can help to overcome them. The eight contributions of this themed issue provide up-to-date information and guidance on these aspects of urticaria and angioedema.

management requires updated knowledge in this rapidly evolving therapeutic area, and Khan et al⁷ provide an up-to-date review of existing and emerging therapies for urticaria as well as various types of angioedema including hereditary angioedema. For the latter, novel prophylactic treatment options have recently become available.

Successful management strategies also require careful consideration of individual patient characteristics, and given current population demographics, it is increasingly important to recognize factors unique to advanced age. To address this, Longhurst et al⁸ provide a detailed review of urticaria and angioedema management implications with advancing age. Once a diagnosis is made and a management plan is implemented, an additional stage of the journey is monitoring the course: How active are the symptoms? How is this affecting the individual? Is the treatment plan having the desired effect? What is the burden of the treatment as well as the condition? The answers to these important questions may represent the ultimate measure of our scientific and clinical efforts: the outcome of improved health. Katelaris et al⁹ provide a comprehensive review of this topic, summarizing approaches and tools available for use in clinical practice.

As clinicians and researchers, the authors of this theme issue provide valuable guidance and help us to learn and refine the best course continuously as we aim to provide control of the condition to patients with urticaria and angioedema. We wish to thank the authors for their comprehensive and valuable contributions to this issue and their ongoing dedication to

advancing the understanding of urticaria and angioedema. Although the journey of scientific research and medical practice is often arduous, this collection of articles aptly demonstrates the considerable progress achieved and the promising road ahead toward improved health and quality of life for our patients with urticaria and angioedema.

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