

The full report is titled: "Pitfalls in anaphylaxis diagnosis and management." It is in the July–August 2018 issue of *Allergy Asthma Proceedings* (volume 39, pages 316 to 321). The authors are Amy Castilano, Britni Sternard, Earl D. Cummings, Runhua Shi, Thomas Arnold, and Sami L. Bahna.

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Pitfalls in the diagnosis and management of anaphylaxis

Anaphylaxis is a serious allergic disorder, with rapid onset and involvement of the skin and mucosal tissues, respiratory compromise, reduced blood pressure, and shock, and, at times, results in a fatal outcome. Common causes of the condition include insect bites and stings, foods, and medications. The primary treatment of anaphylaxis is injection of the adrenal hormone epinephrine administered by injection into a muscle. Despite its seriousness, not only is misdiagnosis or inadequate assessment of the severity of the disorder common but underrecognition of anaphylaxis can lead to suboptimal management, including the underuse or late administration of epinephrine, the life-saving, first-line treatment. In a recent report, Castilano and colleagues from the Allergy/Immunology Section, Emergency Department (ED), and Medicine Department, Louisiana State University Health Sciences Center, Shreveport, Louisiana, evaluated the diagnostic and management parameters of patients who presented with symptoms of anaphylaxis at their university hospital ED and assessed how these factors correlated with disease severity and the training level of the staff.

Who or What Was Proposed to Be Studied?

Of 1341 charts of potential cases studied, only 60 met the diagnostic criteria for anaphylaxis, and, of these, inaccurate coding was noted in 77%, mainly as an "allergic reaction," and only 23% were correctly coded. In the ED, systemic corticosteroids or antihistamines were administered to 85% or 73% of patients, respectively, and only 20% correctly received epinephrine. Ten patients required hospital admission, and, on discharge, only four patients (40%) were given epinephrine autoinjector prescriptions. Of the 50 patients who were discharged from the ED to home care, 48% were given epinephrine autoinjector prescriptions, and only 16% were given a referral for allergy evaluation.

How Was the Study Done?

The study was performed by chart review of patients suspected to have a diagnosis of anaphylaxis on presentation to the university ED.

What Are the Limitations of the Proposed Study?

The report was subjected to limitations inherent to the study of patients at a single institution.

What Are the Implications of the Study?

This report provides a wake-up call for the need for improved awareness and education for both health care professionals and the public as to the seriousness of anaphylaxis and the requirement for immediate and appropriate use of epinephrine as a first line of treatment. In this study, the observed low rates of appropriate diagnosis of anaphylaxis, of epinephrine administration, of epinephrine autoinjector prescribing at discharge, and of referral for allergy evaluation support this need. This recommendation is consistent with current trends of shared decision-making as a key component of patient-centered health care. Shared decision making is a process in which clinicians and patients work together to make decisions and select appropriate diagnostic procedures and treatment regimens that should address many of the deficiencies cited in this report. □