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Guidelines for the management of anaphylaxis

Background

The unique illustrated World Allergy Organization (WAO) Guidelines for the Assessment and Management of Anaphylaxis were created in response to absence of global anaphylaxis guidelines. They were preceded by global assessment of availability of essentials for the diagnosis and treatment of anaphylaxis. Recommendations in the Guidelines were based on the best evidence available, supported by references published at the end of 2010. A global agenda for anaphylaxis research was proposed[1].

Key messages

The Guidelines review patient risk factors for severe or fatal anaphylaxis and co-factors that amplify anaphylaxis. They focus on the supreme importance of making a prompt clinical diagnosis and on the basic initial treatment that is urgently needed and should be possible even in a low resource environment[1].

This treatment involves having a written emergency protocol and rehearsing it regularly; then, as soon as anaphylaxis is diagnosed, promptly and simultaneously calling for help, injecting epinephrine (adrenaline) intramuscularly and placing the patients on their back or in a position of comfort with the lower extremities elevated. Additional critically important steps include administering supplemental oxygen and maintaining the airway, establishing intravenous access and giving fluid resuscitation, and initiating cardiopulmonary resuscitation with continuous chest compressions and rescue breathing, when indicated. Vital signs and cardiorespiratory status should be monitored frequently and regularly (preferably continuously)[1].

The Guidelines also emphasise preparation of the patient for self-treatment of anaphylaxis recurrences in the community, and prevention of recurrences through confirmation of anaphylaxis triggers, providing advice about trigger avoidance, and where relevant, immune modulation[1].

Since the WAO Anaphylaxis Guidelines were published in early 2011, progress in research that is relevant to human anaphylaxis has resulted in more than 500 publications in peer-reviewed indexed medical journals. Much of this research is summarised in the 2012 Update of the Guidelines, as follows:

Patient risk factors and co-factors that amplify anaphylaxis have been documented in prospective studies. The global perspective on the etiologies of anaphylaxis has expanded. The clinical criteria for the diagnosis of anaphylaxis that are promulgated in the Guidelines have been validated. Some aspects of anaphylaxis treatment have been prospectively studied. Novel investigations of self-injectable epinephrine for treatment of anaphylaxis recurrences in the community have been performed[2].

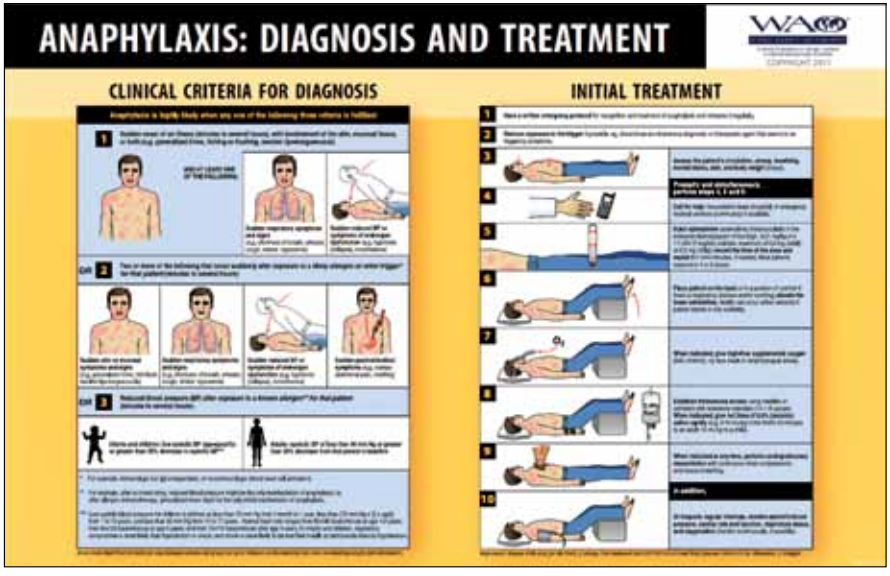
Progress has been made with regard to measurement of specific IgE to allergen components (component-resolved testing) that might help to distinguish clinical risk of future anaphylactic episodes to an allergen from asymptomatic sensitisation to the allergen. New strategies for immune modulation to prevent food-induced anaphylaxis and new insights into subcutaneous immunotherapy to prevent venom-induced anaphylaxis have been described[2].

Summary and conclusion

Taken together, the WAO Anaphylaxis Guidelines and the 2012 Guidelines Update provide timely, evidence-based recommendations for the assessment, management and prevention of anaphylaxis.

References

1. Simons FER, Ardusso LRF, Bilo MB *et al*, for the World Allergy Organization. World Allergy Organization guidelines for the assessment and management of anaphylaxis. *J Allergy Clin Immunol* 2011;127:587-93.e1-e22
2. Simons FER, Ardusso LRF, Bilo MB *et al*, for the World Allergy Organization. 2012 Update: World Allergy Organization (WAO) guidelines for the assessment and management of anaphylaxis. *Curr Opin Allergy Clin Immunol* 2012 (in press)



For further information about the figure, please see the legends to figure 3 and figure 4 in the WAO Anaphylaxis Guidelines (Simons FER *et al*, for the WAO. *J Allergy Clin Immunol* 2011;127; pages 593.e6 and 593.e10, available at www.jacionline.org)