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Clinical Allergy Tips

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From the Editor: Prompt diagnosis and treatment of anaphylaxis is essential to prevent unwanted outcomes. In this Clinical Allergy Tip, Dr. Manuel Branco Ferreira provides practical information on how to recognize possible anaphylactic reactions.

Early Anaphylaxis Recognition: When an Itch is Not Just an Itch

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Anaphylaxis is a serious, life-threatening generalized or systemic hypersensitivity reaction, in most cases due to food, drugs, venoms or latex but can also be caused by cold or other stimuli (1). Anaphylaxis can present with non life-threatening symptoms (affecting the cutaneous or gastrointestinal system) or could be a killer allergy because of asphyxia (laryngeal edema or severe bronchospasm) or cardiovascular collapse (anaphylactic shock). In a majority of cases respiratory or cardiovascular symptoms are preceded by cutaneous symptoms (2).

Anaphylaxis should be promptly recognized and adequately treated. Although the evidence base for the management of patients with anaphylaxis is low due to the absence of randomized and controlled studies of therapeutic interventions (1), it is consensual that intramuscular epinephrine is the mainstay of treatment of life-threatening anaphylaxis (1,3) due to its actions in alpha and beta adrenergic receptors in the muscles of the bronchi, heart and arterial wall. Intravenous fluids, supplemental oxygen, systemic steroids and antihistamines are also part of the armamentarium for anaphylaxis treatment.

- Anaphylaxis is not rare in our daily allergological practice (challenge or desensitization procedures, injections of specific immunotherapy or others). Many anaphylactic reactions are mild but there can be a very rapid progression with respiratory or cardiovascular involvement. Therefore it is necessary to be alert to the very first signs of what can

become a severe anaphylactic reaction. In this regard, and although the position papers usually refer to generalized pruritus or generalized urticarial/hives, in our experience we have repeatedly found that pruritus in some locations of the body usually herald a more severe course of the anaphylactic reaction and should prompt an immediate intervention. These locations are:

- Palms (hands)
- Soles (feet)
- Hair scalp
- Vulva
- Anus

When we have a patient that, in the course of any procedure with an anaphylaxis risk, starts scratching his/her hands, feet or head or if he/she reports vulvar or anal pruritus (note that regarding the latter two we have to specifically ask patients about it because many won't feel at ease to report it spontaneously), even if not in the presence of generalized itch or other symptoms, we immediately start our anaphylaxis routines:

- Thorough evaluation of the skin (looking for erythema or hives not initially present);
- Monitorization of heart rate, blood pressure and oxygen saturation (SaO2) by pulse oximetry;
- Chest examination and, if possible, a spirometric or peak-flow measurement that can be repeated and compared every 5-10 minutes;
- Adrenaline immediately prepared for intramuscular administration.

1) Simons FER, Ardusso LRF, Bilò MB, et al. World Allergy Organization Guidelines for the Assessment and Management of Anaphylaxis. WAO Journal 2011;4:13-37
2) Serbes M, Can D, Atlihan F, Gunay I, Asilsoy A, Altinoz S. Common features of anaphylaxis in children. Allergol Immunopathol (Madr) 2013;41(4):255-60
3) Sheikh A, Shehata YA, Brown SGA, Simons FER. Adrenaline (epinephrine) for the treatment of anaphylaxis with and without shock. Cochrande Database of Systematic Reviews 2008; issue 4. Art. No. CD006312. DOI:10.1002/14651858.CD006312.pub2

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