

10-minute consultation Anaphylaxis

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This is part of a series of occasional articles on common problems in primary care

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A 60 year old man attends to discuss his recent allergic reaction to an insect sting. He presents you with the casualty letter which reads: "Treated for anaphylaxis after bee sting—see GP for follow-up."

What issues you should cover

What happened, and was this anaphylaxis? The term anaphylaxis refers to an acute, potentially life threatening, systemic allergic disorder that involves the cardiovascular or respiratory system, or both.

How quickly did the reaction develop? Symptoms of anaphylaxis typically begin within minutes of exposure. The quicker the onset of symptoms, the more severe the clinical reaction is likely to be. Early features include flushing, urticaria, and intense anxiety (often described as "a feeling of impending doom").

What treatment did he receive? Ask whether he received adrenaline and the effect it had.

Was wasp or bee venom the trigger? Differentiating between anaphylaxis induced by wasp venom or bee venom is important for giving advice on how best to minimise risk of further stings, and when considering desensitisation therapy. If the offending bee or wasp is seen it is usually easily recognisable; if not, a serum specific IgE test differentiates between the two.

Is he at high risk of further stings? Inquire about his job and hobbies to assess the risk of further stings; gardeners and beekeepers are at particularly high risk.

Is he at high risk of adverse outcomes from further stings? Reactions to further stings are unpredictable; only 50% of those who are stung again will have a similar or worse reaction. Those with a history of cardiovascular disease or asthma are at particularly high risk of serious adverse outcomes.

How will it impact on quality of life? Living with the risk of anaphylaxis can seriously impair quality of life. Ask about any particular concerns he may have and consider the possible impact of the reaction on his personal, professional, and social life.

Are other family members likely to react similarly? Venom allergy is unrelated to atopy and is no more likely to affect other family members than the general population.

What you should do

- Contact the casualty department for a more detailed account of what happened.
- Ensure that the diagnosis of anaphylaxis is clearly documented in the medical records.
- Explain that for most people venom stings are a relatively rare occurrence (on average one sting every 15 years).
- Advise on ways of minimising further exposure. These include keeping bare skin to a minimum during peak exposure times, avoiding drinking directly from soft drinks cans, and avoiding walking barefoot on grass.

Useful reading

Committee on Safety of Medicines. Desensitisation vaccines: new advice. *Current Problems in Pharmacovigilance* 1994;20:5

Project team of the Resuscitation Council (UK). Emergency medical treatment of anaphylactic reactions. *J Accid Emerg Med* 1999;16:243-8

Project team of the Resuscitation Council (UK). Update on the emergency medical treatment of anaphylaxis reactions for first medical responders and for community nurses. *Resuscitation* 2001;48:241-3 (revised May 2005: www.resus.org.uk/pages/reaction/htm)

Walker S, Sheikh A. Managing anaphylaxis: effective emergency and long term care are necessary. *Clin Exp Allergy* 2003;33:1015-8

- Prescribe self administered adrenaline. Arrange to teach the patient when and how to use adrenaline using a trainer injection pen. Review annually to check technique and to ensure device is in date.
- Avoid use of non-cardiac selective β blockers (celiprilol, labetalol, etc). These may impair the effectiveness of adrenaline.
- Recommend obtaining a Medic Alert bracelet or necklace (www.medicalert.co.uk). This gives the history of anaphylaxis, trigger factors, and location of self administered adrenaline.
- Request serum specific IgE to wasp and bee venom to help differentiate between the two and to establish the presence of allergic sensitisation. To reduce risk of false negative tests, testing should be delayed for two weeks after systemic reactions.
- Consider referral to an allergist for desensitisation therapy. Immunotherapy is expensive, time consuming, and potentially hazardous and is therefore only really indicated in those with a history of anaphylaxis (manifesting as cardiovascular or respiratory symptoms) and who are at high risk of further stings or have debilitating anxiety. Details of specialists who administer immunotherapy are available from www.bsaci.org.uk

Endpiece

Duties of a physician

One of the first duties of the physician is to educate the masses not to take medicine.

Sir William Osler

Submitted by Rajesh K Choudhary, staff grade surgeon, Bishop Auckland