

key points

SELECTED BY

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Anaphylaxis is defined as a severe, life-threatening, generalised or systemic hypersensitivity reaction. Diagnosis is based on the presenting symptoms and signs which classically develop rapidly, typically evolving over minutes but in some cases hours. Various combinations of airway and/or breathing and/or circulatory problems are possible, as well as urticaria, and hypotension. Skin and/or mucosal changes (typically urticaria and/or angioedema) are seen in around 75% of cases, but importantly these features alone are insufficient for a diagnosis of anaphylaxis.

As soon as possible after successful emergency treatment, timed blood samples should be taken for the mast cell tryptase (MCT) test. Serum samples need to be taken within 1-2 hours but no later than 4 hours from the onset of symptoms. If possible a second paired and timed sample within the same time frame is useful. It is important to document the acute clinical features (record blood pressure, respiratory rate etc) and in particular, the time course of the onset of symptoms/signs and their resolution.

The majority of triggers provoke symptoms within one hour of exposure. Injected agents including medical drugs or bee/wasp venom act most rapidly, with some reactions following foods and oral medicines producing delayed reactions after a couple of hours. Because of the risk of relapse the guidelines recommend that patients should be observed for 6-12 hours after the onset of symptoms. Children younger than 16 years should be admitted and supervised by a hospital paediatrician.

An adrenaline injector device for intramuscular use only, should be prescribed appropriately for body weight as an interim measure before referral to a specialist allergy clinic. Referral to a specialist allergy service (or specialist paediatric service), is strongly recommended. The BSACI website (www.bsaci.org) lists many suitable clinics with contact details. Diagnosis can be confirmed, and further investigations organised not least with a view to identifying or confirming triggers.

Uniphasic reactions are the norm with clinical features peaking at around 30 minutes after the trigger event, and full recovery (either spontaneously or as a result of treatment) within the next 30-60 minutes. By contrast biphasic responses are reported when an apparently fully resolved uniphasic response is followed by relapse without further exposure to the trigger substance.

The only available tests aimed at identifying trigger agents assume an IgE-based mechanism, and therefore are more likely to be helpful when symptom onset is rapid (minutes) rather than delayed (hours). Selection and interpretation of IgE-specific blood testing and/or skin prick testing, is best left to the clinic specialists.