key points

SELECTED BY

Dr Peter Saul
GP with an interest in allergy, Wrexham, and Associate GP Dean, N. Wales, UK

Anaphylaxis is a serious potentially life-threatening systemic hypersensitivity characterised by airway, breathing and/or circulation compromise. Anaphylaxis is a clinical diagnosis. A European study has estimated that around 1 in 300 people experience an episode of anaphylaxis in their lifetime. There was a seven-fold increase in hospitalisations across the UK between 1992 and 2012 although no increase in fatalities was seen. Hospital admissions due to anaphylaxis result from exposure to food such as peanuts, tree nuts and cow's milk, medication and venom, with the likely culprit varying with the age of the patient. However, one third of cases have no clear trigger.

Where feasible, any trigger should be removed. Patients should be maintained in a comfortable yet safe position. Hypotensive patients should be placed in a supine position with or without leg elevation but those with airway or breathing compromise may prefer to sit up. A standard dose of 500 micrograms (0.5 ml of 1:1,000 adrenaline) is recommended in adults, whereas dosage varies in children depending on age/weight. Doses should be administered at 5 minute intervals, along with intravenous fluid boluses to manage third spacing that occurs in anaphylaxis.

Antihistamines and corticosteroids no longer feature in the initial management of anaphylaxis although corticosteroids may be considered as an adjunct in patients in whom an element of asthma exacerbation is thought to be contributing to the severity of the reaction. Non-sedating antihistamines such as cetirizine may provide symptomatic relief of urticaria and angioedema, and can be considered once the patient is stable.

Adults who have received treatment for suspected anaphylaxis should be observed for 6-12 hours after symptom onset and children under 16 should be admitted to hospital. Identification of historical factors such as activities and exposures in the hours leading up to symptom onset will assist with identification of possible triggers as well as cofactors implicated in the episode. If a trigger has been identified, the patient should be educated about appropriate avoidance strategies.

Individuals with a past history of anaphylaxis are at increased risk of another episode so should be offered an action plan and provision of an adrenaline autoinjector should be considered. All patients who have had an episode of anaphylaxis should be referred to an age appropriate allergy service.