ACUTE ANAPHYLAXIS
Supporting information

This guideline has been prepared with reference to the following:

Resuscitation Council. Emergency treatment of anaphylaxis. 2021

https://www.resus.org.uk/sites/default/files/2021-05/Emergency%20Treatment%20of%20Anaphylaxis%20May%202021_0.pdf

NICE. Anaphylaxis: assessment and referral after emergency treatment. 2020. London. NICE

https://www.nice.org.uk/guidance/cg134

Shaker MS, Wallace DV, Golden DBK et al. Anaphylaxis-a 2020 practice parameter update, systematic review, and Grading of Recommendations, Assessment, Development and Evaluation (GRADE) analysis. J Allergy Clin Immunol. 2020;145:1082-123

Soar J. Emergency treatment of anaphylaxis in adults: concise guidance. Clin Med 2009;9:1-5

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4952677/

Adrenaline 500 microgram (0.5 ml of 1:1000 solution) IM (repeated in 5 min if no reaction) is appropriate for patients with hypotension, or respiratory distress with stridor or wheezing?
In the absence of clinical trials, this advice is based on clinical observation and animal models. It concurs with the advice of the UK Resuscitation Council (2008) and the dosing represents a cautious midpoint between US (0.3-0.5 mg) and European (0.5-1.0 mg) recommendations (McLean-Tooke, 2003).

Project Team of the Resuscitation Council (UK). The emergency medical treatment of anaphylactic reactions for first medical responders and for community nurses. Resuscitation Council (UK). 2008
https://www.resus.org.uk/anaphylaxis/emergency-treatment-of-anaphylactic-reactions/

McLean-Tooke AP, Bethune CA, Fay AC, et al. Adrenaline in the treatment of anaphylaxis: what is the evidence? BMJ 2003;327:1332-5
http://www.bmj.com/content/327/7427/1332

Evidence Level: V

Patients taking tricyclic antidepressants or MAOI inhibitors should receive no more than 200 mcg of adrenaline?
The Resuscitation Council (UK) had previously stated that “Patients who are taking tricyclic antidepressants or monoamine oxidase inhibitors should receive only 50% of the usual dose of adrenaline because of an interaction which is potentially dangerous“ (Working Group of Resuscitation Council UK, 2021). However, in 2021 the Resuscitation Council changed their guidance which now reads: “Dose adjustments [*for adrenaline*] are no longer recommended in specific patient groups, for example in patients taking tricyclic antidepressants”.

Working Group of Resuscitation Council UK. Emergency medical treatment of anaphylaxis: Guidelines for healthcare providers. Resuscitation Council (UK). 2021
https://www.resus.org.uk/library/additional-guidance/guidance-anaphylaxis/emergency-treatment

Evidence Level: V

Salbutamol should be considered in patients on a non-cardioselective beta-blocker?
Severe anaphylaxis in patients on non-cardioselective beta-blockers may not respond to adrenaline, which furthermore may cause severe hypertension (Lang, 1995; Newman, 1981). Salbutamol is recommended in UK guidelines (Anon, 2021) as a useful adjunctive measure.

Working Group of Resuscitation Council UK. Emergency medical treatment of anaphylaxis: Guidelines for healthcare providers. Resuscitation Council (UK). 2021
https://www.resus.org.uk/library/additional-guidance/guidance-anaphylaxis/emergency-treatment

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Lang DM. Anaphylactoid and anaphylactic reactions: hazards of beta-blockers. Drug Saf 1995;12:299-304

Newman BR, Schultz LK. Epinephrine-resistant anaphylaxis in a patient taking propranolol hydrochloride. Ann Allergy 1981;47:35-7

Evidence Level: V

Last amended October 2023
Last reviewed January 2026