2-4a Anaphylaxis v.1

*v.1 Obstetric Anaesthetists’ Association 2024. Issued under Creative Commons license CC BY-NC-SA 4.0. See* [*www.oaa-anaes.ac.uk/qrh*](http://www.oaa-anaes.ac.uk/qrh)

Anaphylaxis is a life-threatening hypersensitivity reaction featuring rapidly developing hypotension and tachycardia, and potentially life threating airway obstruction or bronchospasm. **Common causative agents**: antibiotics, anaesthetic agents, IV colloids, blood products. Latex: catheters, dressings, gloves. Chlorhexidine: skin preparation, impregnated lubricants, or catheters

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| **Box C: Post event actions** |
| ⯈ Stop suspected triggers currently prescribed  ⯈ Take 2nd tryptase sample at 1-2 hrs, and 3rd after 24 hrs  ⯈ Consider cetirizine (10-20 mg PO) for cutaneous symptoms  ⯈ Make referral to a specialist allergy clinic or immunology centre to identify the causative agent (see www.bsaci.org)  ⯈ Report anaphylactic drug reactions (www.mhra.gov.uk)  ⯈ Inform the woman and her GP |

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| **Box D: Critical changes** |
| Refractory anaphylaxis  **2-4b**  Cardiac arrest  **1-1** |

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| **Box A: Position** |
| **If cardiovascular compromise.** Lie flat, tilt bed head down  **Avoid aortocaval compression:**  ⯈ Place in full left lateral position**; *or***  ⯈ Supine with manual uterine displacement; *or*  ⯈ 15° lateral tilt (if bed/operating table permits)  **If respiratory problems without cardiovascular compromise**:  ⯈ Place in sitting position |

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| **Box B: Drug doses and treatments** |
| ⯈ **Adrenaline bolus** \*500 micrograms IM (0.5 mL of 1:1000 adrenaline)  to anterolateral aspect of mid-thigh *–or–* [specialist use] 50 micrograms IO/IV with appropriate monitoring.  ***\*****IM generally preferred; IV/IO adrenaline ONLY to be given by experienced specialists*  ⯈ **Oxygen** 15 L/min via reservoir mask *–then–* titrate to SpO2 94-98%  ⯈ **Crystalloid bolus** e.g., 500-1000 ml Hartmann’s titrate to response  **(reduce to 250-500 ml if pre-eclamptic)** |

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| **❶** |  | **Call for help** (obstetrician, midwife, anaesthetist +/- neonatal team +/- cardiac |
|  |  | arrest team) |
|  | ⯈ | **Ask**: “who will be the team leader?” |
|  | ⯈ | **Team leader assigns** checklist reader and scribe |
|  | ⯈ | **Note time** |
| **❷** |  | **Assess clinical status using the ABCDE approach** |
|  | ⯈ | Position woman appropriately (**Box A**) |
|  | ⯈ | Check airway *–then–* give high flow oxygen |
|  | ⯈ | If airway involvement  call anaesthetics/ICU |
|  | ⯈ | Start continuous monitoring: SpO2, respiratory rate, 3-lead ECG and blood pressure |
| ❸ |  | **Treat anaphylaxis** |
|  | ⯈ | Give adrenaline 500 mcg IM. If no improvement  repeat at 5 minute intervals |
|  |  | (**Box B**) |
|  | ⯈ | Give rapid IV crystalloid bolus |
|  | ⯈ | Remove any suspected causative agents |
| ❹ |  | **Assess response** |
|  | ⯈ | If no improvement in cardiac or respiratory symptoms after two doses of IM adrenaline state ‘refractory anaphylaxis’ *–then–*  **2-4b** |
| ❺ |  | **Take mast-cell tryptase sample** |
|  | ⯈ | 5-10 mL clotted blood drawn as soon as feasible following initial resuscitation |
| ❻ |  | **Consider transfer of the woman to critical care setting** |
| ❼ |  | **Start post event action** (**Box C**) |