Anaphylaxis during Anaesthesia

Differential Diagnosis Card



ANZAAG

Possible Causes & Actions • Hypoxia • Hypovolaemia • Hypo/hyperkalaemia/metabolic disorders • Hypo/hyperthermia **Cardiac Arrest** Tension pneumothorax (Decompress) Tamponade • Toxins Thrombosis: pulmonary or coronary Dyspnoea, wheeze, stridor, difficulty inflating lungs Circuit malfunction — Check using Self Inflating Bag Misplaced/kinked Airway device — Check with suction catheter/Consider changing device **High Airway Pressure**/ Tension pneumothorax — **Decompress Airway Compromise** Exacerbation of Asthma — Treat as per Refractory Management Foreign Body — Consider bronchoscopy Acid aspiration — Consider bronchoscopy

Hypotension	 Hypovolaemia Sepsis Drug overdose Vasodilation by drugs Neuraxial blockade Embolism: Thrombotic, Air or Amniotic Vasovagal
Skin and Mucosa Hives, flushing, erythema, urticaria, swelling head and neck or peripheries	 Direct Histamine Release Venous obstruction Head down position C1-esterase deficiency (Angioedema only) Mastocytosis Cold induced anaphylaxis

Absence of tachycardia or cutaneous signs does not exclude anaphylaxis Anaphylaxis is usually rapid in onset but is occasionally delayed

Mild (Grade 1)	Generalised mucocutaneous signs: Erythema, Urticaria+/- Angioedema
Moderate (Grade 2)	Moderate – Multi-organ manifestation may include: • Hypotension, tachycardia • Evidence of bronchospasm, cough, difficult ventilation • Mucocutaneous signs
Life Threatening (Grade 3)	Life Threatening and requiring immediate and specific treatment: Severe hypotension Bradycardia or tachycardia, arrhythmias Severe bronchospasm, and/or airway oedema Cutaneous signs may be absent, or present only after correction of hypotension
Arrest (Grade 4)	Cardiopulmonary Arrest

Appendix 5 ANZAAG-ANZCA Perioperative Anaphylaxis Management Guidelines version 2 May 2016. The scientific rationale and evidence base for the recommendations on this card is explained in more detail at www.anzca.edu.au and www.anzaag.com © Copyright 2016 – Australian and New Zealand College of Anaesthetists, Australian and New Zealand Anaesthetic Allergy Group. All rights reserved.