

# **ANZCA and FPM CPD Program**

# Anaphylaxis ER session guideline

# Group activity Category 3 Emergency response

# **Purpose**

This guideline assists hospitals, private practice groups and other course providers develop and conduct Anaphylaxis Emergency Response (ER) sessions. It defines the learning objectives and other requirements for education providers to become recognised Anaphylaxis ER providers for the purposes of the ANZCA and FPM CPD program.

For CPD participants, this guideline provides information on what recognised Anaphylaxis ER sessions involve and how to record this activity.

#### Related documents

Anaphylaxis ER activity recognition of suitability application form
 Course providers must apply for college recognition of your session as a suitable
 Anaphylaxis ER activity for the ANZCA and FPM CPD program. Providers are
 encouraged to develop sessions that also satisfy local needs, incorporating local staff,
 work environments and equipment.

# Importance of Anaphylaxis ER education

Perioperative anaphylaxis is infrequent but all anaesthetists, and specialist pain medicine physicians (SPMPs) whose practice includes interventional procedures, must be prepared to deal with such a crisis if it occurs. Multiple factors pose challenges to anaesthetists and SPMPs in crisis situations, including diagnostic uncertainty and insufficient familiarity with management steps. There is reasonable evidence that suboptimal care has contributed to preventable morbidity. Lack of knowledge about appropriate follow up and referral (for definitive testing and diagnosis) places patients at risk for recurrence of anaphylaxis. Anaesthetists and SPMPs should know how to locate and refer to their nearest anaesthetic testing centre.

Anaesthetists and SPMPs should:

- recognise the onset of suspected anaphylaxis and declare it as an 'Anaphylaxis Emergency'.
- commit to interventions to maintain/restore cardiovascular stability and oxygenation implemented according to the ANZCA/ANZAAG Anaphylaxis Management Guidelines.
- understand that omitting referral of a suspected episode of anaphylaxis could place the patient
  at risk of death or morbidity with future anaesthesia. Referral should not be delegated to the
  surgical team or general practitioner but is the responsibility of the treating
  anaesthetist/SPMP.

Knowledge of management guidelines, recognition of anaphylaxis, and rehearsal of emergency procedures are essential components of training. Ideally this training occurs within a team, and in the regular working environment of the anaesthetist or SPMP.

Participants should be aware of electronic resources to assist them to develop an <u>Anaphylaxis Box</u>, which can be made available to assist with this training, and be used in the event of anaphylaxis in all operating theatres where they work.



#### Recommended resources

## Recommended algorithms

#### Management of perioperative anaphylaxis

ANZCA has co-badged the Australian and New Zealand Anaesthetic Allergy Group (ANZAAG) <u>Anaphylaxis Management Guidelines</u> for the management of perioperative anaphylaxis in settings where medical professionals with experience titrating intravenous adrenaline provide continuous monitoring of physiological parameters.

### Anaphylaxis in other settings

The college recognises that several published algorithms exist for the treatment of anaphylaxis. Many of these involve the treatment in settings other than a highly monitored critical care environment and are intended for use by noncritical care specialists.

- For the treatment of other anaphylaxis outside of these settings, Australian Society of Clinical Immunology and Allergy (ASCIA) <u>Acute Management of Anaphylaxis Guidelines</u> should be followed.
- The <u>New Zealand Resuscitation Council (NZRC)</u> Whakahauora Aotearoa also provides algorithms for the management of anaphylaxis in adults and children.

#### Recommended reading

- Australian and New Zealand College of Anaesthetists (ANZCA) and Australian and New Zealand Anaesthetic Allergy Group (ANZAAG). Perioperative Anaphylaxis Management Guidelines. 2022. [Internet] <a href="https://www.anzca.edu.au/resources/professional-documents/endorsed-guidelines/anaphylaxis-guideline-2022.pdf">https://www.anzca.edu.au/resources/professional-documents/endorsed-guidelines/anaphylaxis-guideline-2022.pdf</a> Accessed 26 November 2022.
- Australian and New Zealand College of Anaesthetists (ANZCA) and Australian and New Zealand Anaesthetic Allergy Group (ANZAAG). Perioperative Anaphylaxis Management Guidelines: Background Paper. 2022. [Internet] <a href="https://www.anzca.edu.au/resources/professional-documents/endorsed-guidelines/anaphylaxis-guideline-bp-2022.pdf">https://www.anzca.edu.au/resources/professional-documents/endorsed-guidelines/anaphylaxis-guideline-bp-2022.pdf</a> Accessed 26 November 2022.

#### Session format

The session may be conducted face-to-face or virtually.

 Participants of the ANZCA and FPM CPD program with access to <u>Learn@ANZCA</u>, may complete the <u>Perioperative Anaphylaxis response online module</u>.

# Learning objectives

# Mandatory learning objectives

To achieve recognition for the ANZCA and FPM CPD program, Anaphylaxis ER sessions must provide the opportunity for participants to meet the learning objectives listed below. Objectives marked with an asterisk (\*) require each participant to actively engage in activities to practice this skill during the session.

Objectives that can be addressed in pre-reading are identified. The pre-reading is covered by the ANZCA/ANZAAG Perioperative Anaphylaxis Management Guidelines which has linked references.

By the end of the session, participants will be able to:

#### Knowledge

1. Explain why intravenous administration of medications or mucosal exposure to substances, coupled with the physiological derangements associated with anaesthesia, may exaggerate the speed of onset and severity of the features of anaphylaxis.



- 2. Describe some risk factors for perioperative anaphylaxis including common patterns of cross reactivity such as those within classes of neuromuscular blockers, antibiotics, colloids and blue dyes. (pre-reading)
- 3. Recognise that non-technical and teamwork skills, as well as initiation of management protocols, are vital to the management of anaphylaxis.
- 4. Identify the common clinical features of anaphylaxis, including recognition that anaphylaxis associated with anaesthesia may not present with all of these features, and that the onset will depend on the route of administration, the severity, and the patients' comorbidities and may be temporally delayed.
- 5. Explain how age, comorbidities and pregnancy impact on the management of preoperative anaphylaxis. (pre-reading)
- 6. Describe the clinical grading of anaphylaxis and its relevance to management.
- 7. Explain the pivotal role that adrenaline plays in the treatment of perioperative anaphylaxis and the need for appropriate titration of intravenous adrenaline or the use of intramuscular adrenaline or intramuscular adrenaline to mitigate the risks associated with adrenaline administration.
- 8. Describe the critical importance of adequate fluid resuscitation in the management of hypotension.
- 9. Recognise refractory anaphylaxis switching to an adrenaline infusion, and calling for assistance in order to review the diagnosis, ensure adequate fluid resuscitation, introduce alternative therapies and institute further monitoring.
- 10. Describe the steps required once the patient is stabilised including tryptase measurements and the reasons for serial measurements at appropriate times (1, 4 and 24 hours from the beginning of the reaction).
- 11. Explain why it is the anaesthetist/SPMP's responsibility to ensure that a patient is appropriately investigated by a specialist testing centre.

#### Skills

- 1. Apply the ANZAAG Anaphylaxis during Anaesthesia: Immediate Management card for urgent measures.
- 2. Communicate with other health professional that a critical situation exists when anaphylaxis is suspected and use cognitive aids to improve team performance.
- 3. Adopt the role of team leader in the treatment of anaphylaxis, co-ordinating the team response.
- 4. Use the ANZAAG Anaphylaxis during Anaesthesia: Differential Diagnostic Card to grade the reaction and apply this management recommendations and to review other differential diagnoses.
- 5. Apply the ANZAAG Anaphylaxis during Anaesthesia: Refractory Management card in situations where the Immediate Management steps would not have resulted in stabilisation of the patient's vital signs.
- 6. Apply the ANZAAG Anaphylaxis during Anaesthesia: Post-Crisis Management card including discussing with a patient/family about what has occurred and the planned follow up, providing a list of drugs and/or other substances that were given to the patient prior to the suspected episode of anaphylaxis, in order to alert health professionals in case of an emergency before testing has taken place and arranging follow-up at a specialist testing centre.

#### Session structure

The education session must:

- 1. Provide pre-course reading (could be web-based) that refers to the ANZCA/ANZAAG Perioperative Anaphylaxis management guidelines and provides relevant foundation knowledge of the session content.
- 2. Have a minimum total duration of ninety (90) minutes, which should be discussion of cases and application of the guidelines.



- Provide case-based discussion or scenario-based simulation activities to practice implementation of the ANZCA/ANZAAG Perioperative Anaphylaxis management guidelines.
- 4. Utilise anaphylaxis cases that include a variety of clinical features and degrees of severity at presentation.
- 5. Be facilitated by a post-Fellowship specialist who is appropriately skilled and experienced to deliver the content of the session. If possible the facilitator will have medical education experience and/or credentials.
- 6. Provide one facilitator per 15 participants' for practical simulation or workshops. Facilitators must engage with each participant while they are working through scenarios to ensure they are achieving the objectives of the session
- 7. Course directors who wish to record information relating to the performance or conduct of participants must obtain written consent and adhere to the privacy policies of their organisation and location. ANZCA does not collect this information and it is optional for the course provider and director to do so.

#### Session materials

The following materials (in hard or electronic format) may be provided to facilitators and/or participants as relevant:

- Facilitator guide (including equipment list, scenario outlines)
- Participant list (date, venue, participant names)
- Session learning objectives and outline
- ANZAAG Anaphylaxis management resources as handouts
- Session evaluation form (feedback from participants)
- Certification of completion, including ANZCA recognition code and session duration in hours (must be provided to participants).

# ANZCA and FPM CPD portfolio recording

Participants record this activity under

• Category 3 *Emergency response: Anaphylaxis ER* with the certificate of completion uploaded as evidence.

Facilitators who are also CPD participants record this activity under

• Category 3 Emergency response: *Anaphylaxis ER* with confirmation of facilitation uploaded as evidence.

# Change control register

Version	Author/s	Reviewed by	Approved by	Approval date	Sections modified
1	Advancing CPD 2013 Working Group	CPD team	CPD Committee	2013	Created
2		CPD team ANZCA DPA education		2023	<ul> <li>Updated branding</li> <li>Incorporated change control register</li> </ul>

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