MOET – 4th Edition Australia / New Zealand Manual Supplement

CHAPTER 6: SHOCK

PAGE 48

- Refer to ANZCA Guideline

CHAPTER 11: CARDIOPULMONARY RESUSCITATION

PAGE 102 – Algorithm 11.1

- See attached Australia/ New Zealand Version of Advanced Life Support Flow Chart
- Adrenaline should be administered every second loop (approximately every 4 minutes). Each loop comprises 5 sets of 30 compressions.

PAGE 103 and 104 – Algorithm 11.2

- Instead of Call '999'
  - Call 000 – Australia
  - Call 111 – New Zealand

PAGE 106

- Waveform capnography should be used to confirm airway placement and monitor the adequacy of CPR.
- Ventilate at a rate of 6 to 10 once ETT or supraglottic device placed. Intubation should not interrupt cardiac compressions for more than 5 seconds.

PAGE 107 –Shockable Rhythms - Dot Point 5

- On the shockable side of the algorithm, adrenaline 1mg IV, is given after the second shock and every 2nd cycle; i.e. approximately every 4 minutes. Amiodarone 300mg IV is also given after the third shock.

PAGE 109 - Other Drugs

- Sodium bicarbonate: 1mmol/kg, is initially given over 2-3 minutes, then as guided by arterial blood gases
- Magnesium sulphate: 5mmol (4 mls of 50% solution) may be used for refractory VF, which may be repeated once and followed by an infusion of 20 mmol over four hours.
- Calcium: 5 to 10ml 10% calcium chloride (10 mls is 6.8 mmol Ca^{2+}) IV

Chapter 14: NEWBORN RESUSCITATION

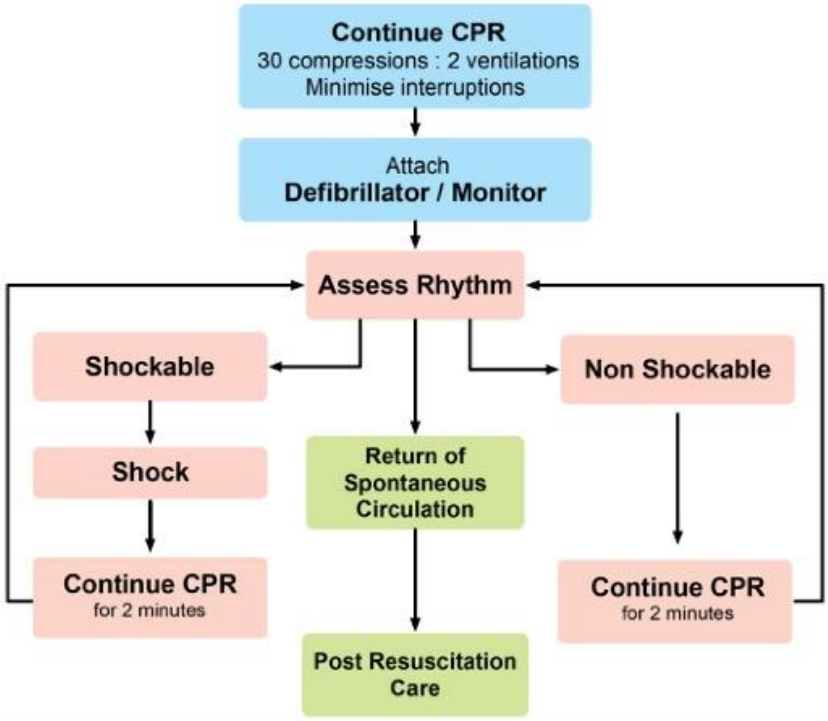
- Refer to ARC or NZRC Guidelines

Chapter 25: NEUROLOGICAL EMERGENCIES

PAGE 221

- Use midazolam (5-10mg IV over 2-5 minutes) as first line rather than lorazepam or diazepam.
- Second line options include levetiracetam (Keppra) or phenytoin.

Adult Advanced Life Support



During CPR
- Airway adjuncts (SGA or ETT)
- Oxygen
- Waveform capnography
- IO or IV access
- Plan actions before interrupting CPR (e.g. charge defibrillator)

Drugs

Shockable
- Adrenaline 1 mg after 2nd shock (then every 2nd cycle)
- Amiodarone 300mg after 3 shocks

Non Shockable
- Adrenaline 1mg immediately (then every 2nd cycle)

Consider and correct
- Hypoxia
- Hypovolaemia
- High or low electrolytes (K, Ca, Mg) & metabolic disorders
- Hypothermia or hyperthermia
- Tension pneumothorax
- Tamponade
- Toxins
- Thrombosis (pulmonary or coronary)

Post Resuscitation Care
- Re-evaluate ABCDE
- 12 lead ECG plus CXR
- Treat precipitating cause
- Aim for SpO2 94-98%, normocapnia, normoglycaemia
- Temperature control

Reviewed August 2023

Anaphylaxis during Anaesthesia

Immediate Management

Adults 12+

CARDIAC ARREST **Pulseless Electrical Activity (PEA)**		• Immediately start CPR • 1 mg IV Adrenaline, Repeat 1-2 minutely prn • Elevate legs. 2 L Crystalloid • ALS GUIDELINES for non-shockable rhythms
SBP < 50mmHg		• Start cardiac compressions
DR	Danger and Diagnosis Response to stimulus	• Unresponsive hypotension or bronchospasm • Remove triggers e.g. chlorhexidine, synthetic colloid • Stop procedure. Use minimal volatile/TIVA if GA
S	Send for help and organise team	• Call for Help and Anaphylaxis box • Assign a designated Leader and Scribe • Assign a Reader of the cards
AB	Check/Secure Airway Breathing - 100% oxygen	• Check capnography – "No Trace = Wrong Place" • Confirm FiO_2 100% • Consider early intubation: airway oedema
C	Rapid fluid bolus Plan for large volume resuscitation	• If hypotensive: Elevate legs • Moderate – 500mL Crystalloid • Life threatening– 1000mL Crystalloid } Repeat as needed • Large bore IV access. Warm IV fluids if possible
D	Adrenaline Bolus Repeat as needed Prepare Infusion	**Initial IV Adrenaline Bolus (Adult)** **1 mg in 10 mL = 100 microg/mL** • Give dose below every 1-2 minutes prn

Moderate

10-20 microg (0.1-0.2mL)

If no response 50 microg (0.5mL)

Life Threatening

50-100 microg (0.5-1mL)

If no response 200 microg (2mL)

IM Adrenaline (Adult)

No IV access or haemodynamic monitoring
OR awaiting Adrenaline Infusion

1:1000 = 1mg/mL
500 microg (0.5mL)
Every 5 minutes prn lateral thigh

Adrenaline INFUSION (Adult)
>3 boluses of Adrenaline start infusion
Can be administered peripherally

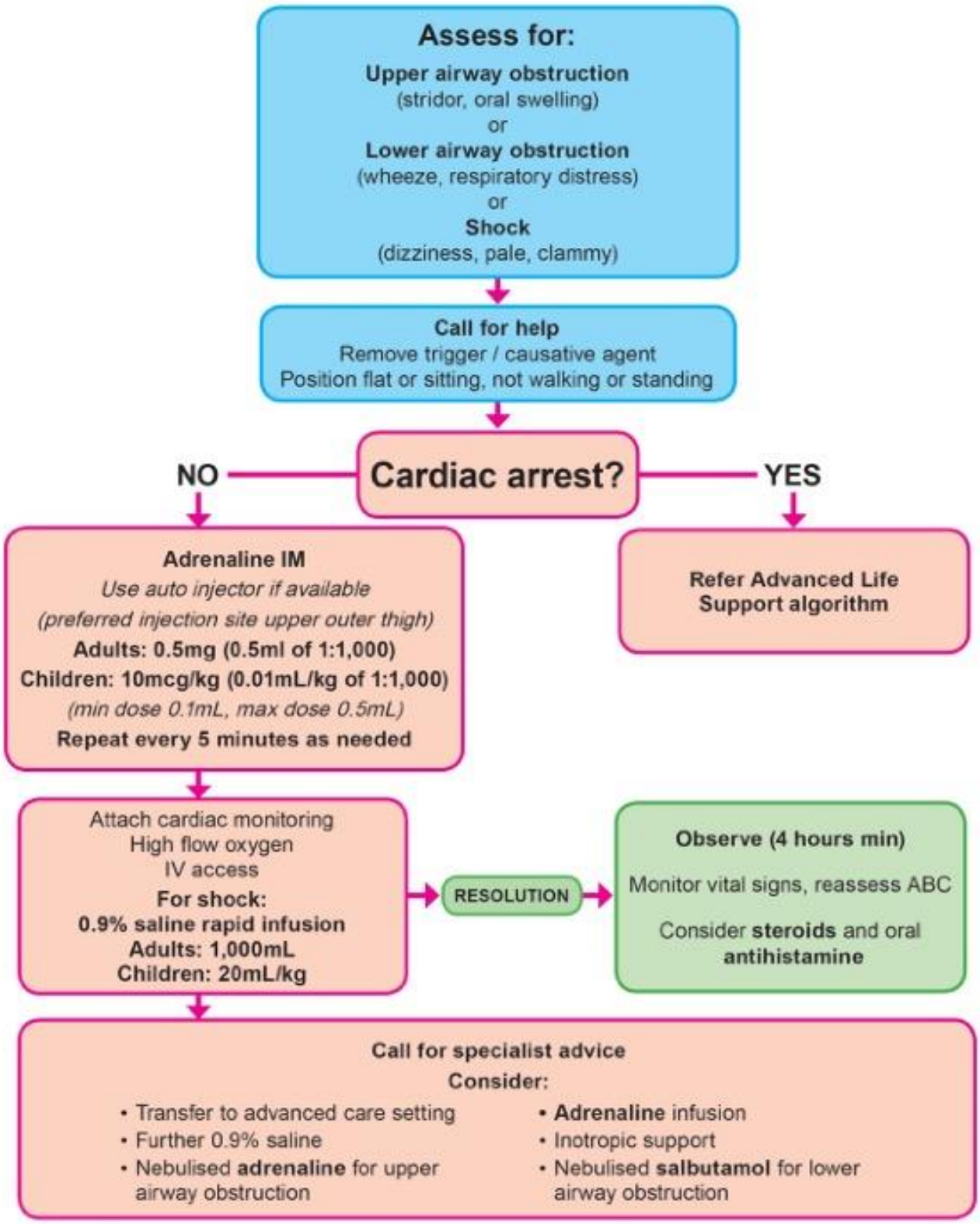
3 mg Adrenaline in 50 mL saline
Commence at 3 mL/hr = 3 microg/min
Titrate to max. 40 mL/hr = 40 microg/min
(Infusion rate 0.05 - 0.5 microg/kg/min)

If NOT RESPONDING see 'Adult refractory management'

ANZCA FPM

ANZAAG

Anaphylaxis



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AUSTRALIAN RESUSCITATION COUNCIL
NEW ZEALAND Resuscitation Council WHAKAHAUORA AOTEAROA

Newborn Life Support

At all stages ask: do you need help?

1 minute

Term gestation?
Breathing or crying?
Good tone?

YES → Stay with Mother → Maintain normal temperature, Ongoing evaluation

NO → Maintain normal temperature, Ensure open airway, Stimulate

HR below 100?
Gasping or apnoea?

NO → Laboured breathing or persistent cyanosis?

YES → Positive pressure ventilation SpO_2 monitoring

YES → Ensure open airway SpO_2 monitoring Consider CPAP

NO → HR below 100?

YES → Ensure open airway
Reduce leaks
Consider:
Increase pressure & oxygen
Intubation or laryngeal mask

NO → Post-resuscitation care

HR below 60?

YES → Three chest compressions to each breath
100% oxygen
Intubation or laryngeal mask
Venous access

HR below 60?

YES → IV Adrenaline
Consider volume expansion

Targeted pre-ductal SpO_2 after birth

1 min	60-70%
2 min	65-85%
3 min	70-90%
4 min	75-90%
5 min	80-90%
10 min	85-90%

IV Adrenaline 1:10,000 solution

Gestation (weeks)	Dose
23-26	0.1 mL
27-37	0.25 mL
38-43	0.5 mL

10-30 mcg/kg (0.1-0.3 mL/kg)

Reviewed August 2023

Australian Resuscitation Council
New Zealand Resuscitation Council
Whakahaūora Aotearoa