

SINGAPORE MEDICAL COUNCIL CATEGORY 3B CME PROGRAMME

(Code SMJ 201707B)

Question 1. If an electrocardiography (ECG) monitor-cum-defibrillator is available when resuscitating an adult patient in cardiac arrest:

- (a) Rhythm checks should be done every 3–5 minutes.
- (b) The first shock must be delivered once the ECG machine is connected.
- (c) Once a defibrillatory shock is delivered, the rhythm should first be checked before any further chest compressions are given.
- (d) Once a defibrillatory shock is delivered, CPR should be resumed immediately for 1–2 minutes before the ECG rhythm is checked.

True False

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Question 2. The following statement(s) is/are true regarding drug use in patients with refractory ventricular fibrillation (VF):

- (a) Amiodarone is superior to lignocaine and adrenaline for conversion of witnessed VF.
- (b) The recommended dose of adrenaline is 1.0 mg given as a 1.0 mL bolus.
- (c) The recommended dose of amiodarone is 300 mg as a first dose and 150 mg every 3–5 minutes later, if VF persists.
- (d) The recommended dose of lignocaine is 1–1.5 mg/kg body weight repeated 3–5 minutes later, if VF persists.

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Question 3. Regarding reversible causes of cardiac arrest:

- (a) Hypoxia, hyperkalaemia and metabolic acidosis should be considered in all patients with pulseless electrical activity (PEA) only.
- (b) Hypoxia, hyperkalaemia and hydrogen ion acidosis should be considered in all patients with refractory VF.
- (c) Use of cardiac ultrasonography is mandatory in all patients in cardiac arrest so that reversible causes may be identified.
- (d) Infusing intravenous 8.4% sodium bicarbonate in cardiac arrest patients prevents PEA that may result from acidosis.

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Question 4. In patients with wide complex tachycardia:

- (a) Intravenous adenosine 6.0 mg should be initially administered to rule out supraventricular tachycardia with aberrant conduction.
- (b) In a 66-year-old man with wide complex tachycardia, the initial management should be the same as that for ventricular tachycardia (VT).
- (c) A patient with VT and a blood pressure of 85/50 mmHg should be immediately defibrillated with unsynchronised shocks of 100 J of biphasic energy.
- (d) Amiodarone and lignocaine are both drugs of choice for those with stable VT.

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Question 5. In a patient presenting with narrow complex tachycardia:

- (a) Either synchronised cardioversion at 50 J after sedation or intravenous adenosine 6 mg may be used if the patient has a regular heart rate of 180 beats per minute and a blood pressure of 74/46 mmHg.
- (b) In addition to intravenous adenosine, intravenous verapamil and diltiazem as slow infusions are acceptable first-line agents for chemical conversion of supraventricular tachycardia.
- (c) Intravenous verapamil and intravenous diltiazem are not advised if the patient has an irregular rhythm at 180 beats per minute and heart failure.
- (d) Carotid sinus massage for conversion of the patient's narrow complex tachycardia involves application of pressure at the midpoint of the common carotid artery at the anterior edge of the sternomastoid muscle.

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Doctor's particulars:

Name in full: _____ MCR no.: _____
 Specialty: _____ Email: _____

SUBMISSION INSTRUCTIONS:

Visit the SMJ website: <http://www.smj.org.sg/current-issue> and select the appropriate quiz. You will be redirected to the SMA login page.

For SMA member: (1) Log in with your username and password (if you have not activated your membership account, please email membership@sma.org.sg). (2) Select your answers for each quiz and click 'Submit'.

For non-SMA member: (1) Create an SMJ-CME account, or log in with your SMJ-CME username and password (for returning users). (2) Make payment of SGD 21.40 (inclusive of 7% GST) via PayPal to access this month's quizzes. (3) Select your answers for each quiz and click 'Submit'.

RESULTS:

(1) Answers will be published online in the SMJ September 2017 issue. (2) The MCR numbers of successful candidates will be posted online at the SMJ website by 14 September 2017. (3) Passing mark is 60%. No mark will be deducted for incorrect answers. (4) The SMJ editorial office will submit the list of successful candidates to the Singapore Medical Council. (5) One CME point is awarded for successful candidates.

Deadline for submission: (July 2017 SMJ 3B CME programme): 12 noon, 7 September 2017.