

CHAPTERS	QUESTIONS	ANSWERS	1. PHYSICIAN	2. PHYSICIAN	ChatGPT TR	ChatGPT ENG
1. GENERAL OVERVIEW FOR CURRENT AHA GUIDELINE (n=5)	1. When was the American Heart Association (AHA) Advanced Cardiac Life Support (ACLS) current guide published?	2020	1	1	1	1
	2. How often is the American Heart Association (AHA) Advanced Cardiac Life Support (ACLS) current guideline updated?	every five years	1	1	1	1
	3. What are the rhythms considered cardiac arrest according to the Advanced Cardiac Life Support (ACLS) algorithm?	Vf, pVT, asystole, PEA	1	1	1	1
	4. What are the shockable rhythms among cardiac arrest rhythms according to the Advanced Cardiac Life Support (ACLS) algorithm?	VT and pVT	1	1	1	1
	5. What are the non-shockable rhythms among cardiac arrest rhythms according to the Advanced Cardiac Life Support (ACLS) algorithm?	asystole and PEA	1	1	1	1
2. AIRWAY MANAGEMENT (n=7)	1. Which airway opening maneuver should be used in the presence of a suspected cervical spine injury according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	jaw thrust	1	1	1	1
	2. Which airway opening maneuver should be used if there is no suspicion for cervical spine injury according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	head tilt–chin lift	1	1	1	1
	3. In which patients should the oropharyngeal airway be preferred over the nasopharyngeal airway according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	known or suspected basal skull fracture and severe coagulopathy	1	1	1	1
	4. Should routine cricoid compression be performed during ventilation, according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	no	1	1	1	1
	5. What is the recommended optimal advanced airway maneuver according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	endotracheal intubation	1	1	1	1
	6. What is the normal value of end-tidal CO2 according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	35–45 mmHg	0	1	1	1
	7. Which end-tidal CO2 value indicates that the ETT is misplaced according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	less than 10 mmHg	0	1	1	1
3. HIGH QUALITY CPR (n=11)	1. In which position should CPR be performed according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	supine position	1	1	1	1
	2. How many seconds can the chest compressions be delayed for pulse check according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	no more than 10 s	1	1	1	1
	3. How often should the chest compression performer be changed in the presence of two rescuers according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	every 2 min (or after about 5 cycles)	1	0	1	1
	4. What should be the compression-ventilation ratio in patients without advanced airway according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	compressions and ventilation at a ratio of 30:2	1	1	1	1
	5. What should be the chest compression fraction during CPR according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	chest compression fraction of at least 60%	0	1	1	1
	6. What should be the chest compression rate per minute according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	perform chest compressions at a rate of 100 to 120/min	1	1	1	1
	7. What should be the depth of chest compressions according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	at least 2 inches, or 5 cm, avoiding greater than 2.4 inches, or 6 cm	1	1	1	1
	8. What are the most important physiological parameters that can be used to monitor and optimize the quality of CPR according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	arterial blood pressure and end-tidal CO2	1	1	1	1
	9. What is the most important finding of poor quality CPR in capnography, according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	end-tidal CO2 less than 10 mmHg	0	1	1	1
	10. Which blood pressure parameter can be used to determine the poor quality CPR according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	diastolic blood pressure	1	1	1	0
	11. What is the most important finding of adequate quality CPR in capnography, according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	end-tidal CO2 at least 10 mmHg, ideally 20 mmHg or greater	0	1	1	1
4. VENTILATION (n=8)	1. According to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm, ventilation can be provided through the oral route or via a bag-valve-mask if advanced airway is not available. Is it true or false?	true	1	1	1	1
	2. Approximately how many ml should the tidal volume volume be during ventilation in patients with cardiac arrest according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	tidal volumes of approximately 500 to 600 mL	1	1	1	1
	3. Is hyperventilation recommended during CPR according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	no (avoid excessive ventilation)	1	1	1	1
	4. If the victim's mouth is not suitable during CPR, how should ventilation be provided according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	mouth-to-nose ventilation	1	1	1	1
	5. Ventilation should be performed mouth-to-mouth or face mask (pediatric preferred)–to-stoma during the CPR of a patient with a tracheostomy according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm. Is it true or false?	true	1	1	1	1
	6. What should be the ventilation frequency in patients with spontaneous circulation, according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	use a rate of 10 breaths per minute (1 breath every 6 s)	0	1	0	1
	7. What should be the ventilation frequency in patients without advanced airway, according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	use a rate of 10 breaths per minute (1 breath every 6 s)	1	1	0	1
	8. What should be the ventilation frequency in patients with advanced airway, according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm? (if an advanced airway is in place)	use a rate of 10 breaths per minute (1 breath every 6 s)	1	1	0	1
5. DEBRILLATION (n=12)	1. What should be done in the presence of tachyarrhythmias requiring shock therapy according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	defibrillation	1	1	1	1
	2. Which of the defibrillation waveforms should be preferred in the presence of tachyarrhythmias requiring shock therapy according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	using biphasic waveforms are preferred	1	1	1	1
	3. The dose of defibrillation is same in biphasic and monophasic applications according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm? Is it true or false?	false	1	1	1	1
	4. What is the maximum initial dose for monophasic defibrillators according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	360 J	1	1	1	1
	5. What is the maximum initial dose for biphasic defibrillators according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	200 J	0	0	0	1
	6. What is the recommended initial dose for biphasic defibrillators according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	120–200 J	0	1	1	1
	7. What should be the minimum size of the paddles during defibrillation in adults according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	electrode diameter more than 8 cm in adults	0	0	1	1
	8. When should the pulse check be performed after shock delivery according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	after 2 min (or after about 5 cycles)	1	1	1	0
	9. What is the recommended defibrillation dose in shockable arrhythmias if the manufacturer's recommended dose is unknown according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	defibrillation at the maximal dose may be considered	1	1	1	0
	10. How should the energy level of the subsequent defibrillation shock be adjusted compared to the previous shock according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	higher energy for second and subsequent shocks may be considered	1	1	1	1
	11. How should the paddle placement be during defibrillation according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	anterolateral or anteroposterior	1	1	0	1
	12. Double sequential defibrillation has more successful outcome than standard defibrillation in the presence of refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm? Is it true or false?	false	1	1	1	0
6. MEDICATIONS (n=22)	1. Which vasopressor is recommended for during cardiac arrest, according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	epinephrine	1	1	1	1
	2. What's the dose of epinephrine according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	1 mg	1	1	1	1
	3. At what concentration should intravenous adrenaline be prepared in according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	1 mg Adrenaline is administered at a concentration of 1:10,000 in intravenous administration	0	0	1	1
	4. What is the adrenaline application frequency according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	every 3–5 minutes	1	1	1	1
	5. When should adrenaline be administered in the presence of a non-shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	as soon as possible / immediately	1	1	1	1
	6. When should adrenaline be administered in the presence of a shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	after shock therapies (after the second shock)	1	0	0	0
	7. "Routine high-dose epinephrine should be used in cases with no response to CPR according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm." Is it true or false?	false	1	1	1	1
	8. "Vasopressin alone or in combination with epinephrine be preferred instead of epinephrine in patients with cardiac arrest according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm." Is it true or false?	false	1	1	1	1
	9. Which medications can be used in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	amiodarone and lidocaine	0	1	1	1
	10. When should the first amiodarone be administered in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	after third shock	1	1	0	1
	11. When should the second amiodarone be administered in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	after fifth shock	1	1	0	0
	12. When should the first lidocaine be administered in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	after third shock	1	1	0	1
	13. When should the second lidocaine be administered in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	after fifth shock	1	1	0	0
	14. What is the recommended dose of the first amiodarone in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	300mg	1	1	1	1
	15. What is the recommended dose of the second amiodarone in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	150mg	1	1	0	1
	16. What is the administration rate of amiodarone in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	administered as a bolus	1	0	1	1
	17. What is the administration rate of lidocaine in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	administered as a bolus	1	0	1	1
	18. What is the recommended dose of the first lidocaine in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	1–1.5 mg/kg	1	1	1	1
	19. What is the recommended dose of the second lidocaine in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	0.5–0.75 mg/kg	1	1	1	1
	20. "Routine use of atropine is recommended because it will increase the heart rate in patients with cardiac arrest according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm." Is it true or false?	false	1	1	1	1
	21. "Routine use of calcium is recommended because of its positive inotropic effect in patients with cardiac arrest according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm." Is it true or false?	false	1	1	1	1
	22. "Bicarbonate administration is beneficial in every patient with cardiac arrest according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm." Is it true or false?	false	1	1	1	1
7. VASCULAR ACCESS AND ROSC (n=6)	1. What value in capnography is considered indicative of ROSC according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	End-tidal CO2 above 20mmHg	0	0	1	1
	2. "End-tidal CO2 is most reliable when the patient's trachea is intubated, but it can also be used with a SGA or bag mask according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm." Is it true or false?	true	1	1	1	1
	3. What is the first recommended route of drug administration according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	intravenous	1	1	1	1
	4. If intravenous access is unsuccessful, what is the first alternative route of drug administration that should be preferred according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	intraosseous	1	1	1	1
	5. If intravenous or intraosseous access is unsuccessful, what is the first alternative route of drug administration that should be preferred according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	central venous catheter	1	1	1	0
8. CLASS (STRENGTH OF RECOMMENDATION) (n=9)	6. If all vascular access is unsuccessful, what is the alternative route of drug administration that should be preferred according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	endotracheal route	1	0	1	1
	1. What is the class of recommendation (COR) for routine cricoid compression during ventilation according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	Class III	0	0	0	0
	2. What is the class of recommendation (COR) for administering epinephrine during cardiac arrest with shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	Class IIb	1	1	0	0
	3. What is the class of recommendation (COR) for administering amiodarone in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	Class IIb	0	1	1	1
	4. What is the class of recommendation (COR) for administering lidocaine in the presence of defibrillation-resistant refractory shockable rhythm according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	Class IIb	1	1	1	1
	5. What is the class of recommendation (COR) for advanced airway interventions during cardiac arrest according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	Class IIb	1	0	0	1
	6. What is the class of recommendation (COR) for providing 1 breath every 6 s (10 breaths/min) in patients with advanced airway according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	Class IIb	0	1	0	1
	7. What is the class of recommendation (COR) for administering routine magnesium during cardiac arrest according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	Class III	1	1	1	0
	8. What is the class of recommendation (COR) for administering routine calcium during cardiac arrest according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	Class III	1	1	1	1
	9. What is the class of recommendation (COR) for administering routine bicarbonate during cardiac arrest according to the AHA 2020 Advanced Cardiac Life Support (ACLS) algorithm?	Class III	1	1	1	1