

**ACLS PRE-TEST
ANNOTATED ANSWER KEY**

June, 2011

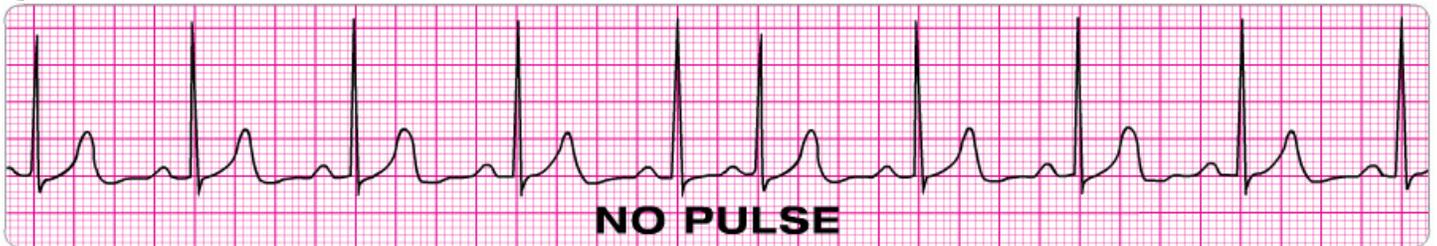
Question 1:



Please identify the rhythm by selecting the best single answer

<input type="checkbox"/>	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
<input type="checkbox"/>	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
<input type="checkbox"/>	Atrial flutter	<input type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
<input type="checkbox"/>	Coarse ventricular fibrillation	<input type="checkbox"/>	Second-degree AV block (Mobitz II block)
<input type="checkbox"/>	Fine ventricular fibrillation	<input type="checkbox"/>	Sinus bradycardia
<input type="checkbox"/>	Monomorphic ventricular tachycardia	<input type="checkbox"/>	Sinus tachycardia
<input checked="" type="checkbox"/>	Normal sinus rhythm	<input checked="" type="checkbox"/>	Third-degree AV block
<input type="checkbox"/>	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

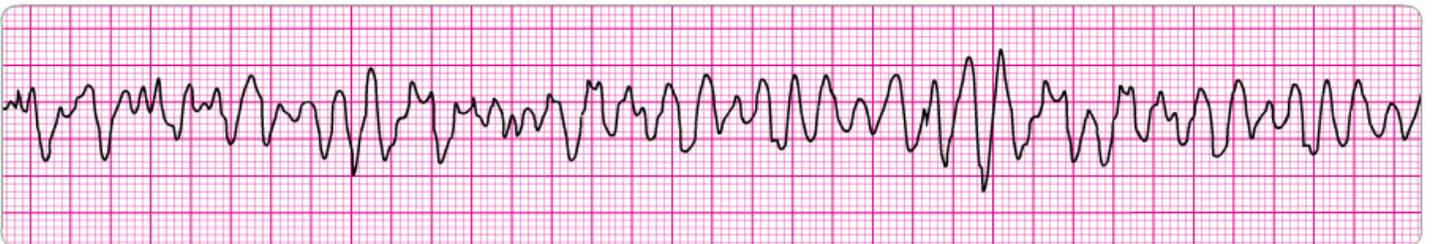
Question 2:



There is **no pulse** with this rhythm. Please identify the rhythm by selecting the best single answer

<input type="checkbox"/>	Agonal rhythm/asystole	<input checked="" type="checkbox"/>	Pulseless electrical activity
<input type="checkbox"/>	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
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<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
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Question 3:



Please identify the rhythm by selecting the best single answer

<input type="checkbox"/>	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
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<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
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Question 4:



Please identify the rhythm by selecting the best single answer

<input type="checkbox"/>	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
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<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
<input type="checkbox"/>	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

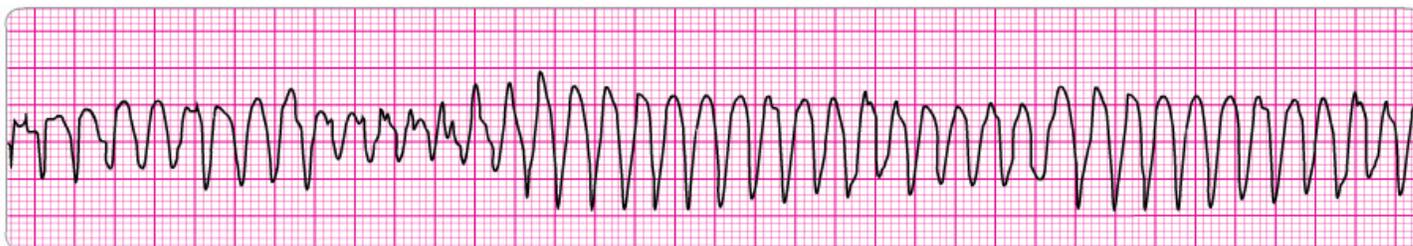
Question 5:



Please identify the rhythm by selecting the best single answer

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Question 6:



Please identify the rhythm by selecting the best single answer

<input type="checkbox"/>	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
<input type="checkbox"/>	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
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<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
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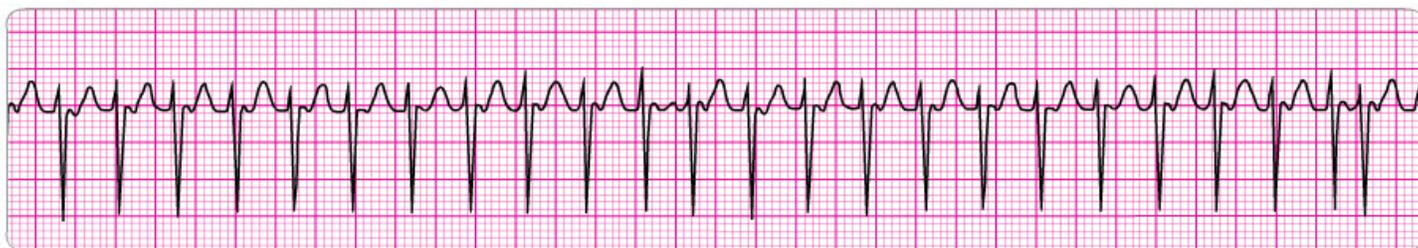
Question 7:



Please identify the rhythm by selecting the best single answer

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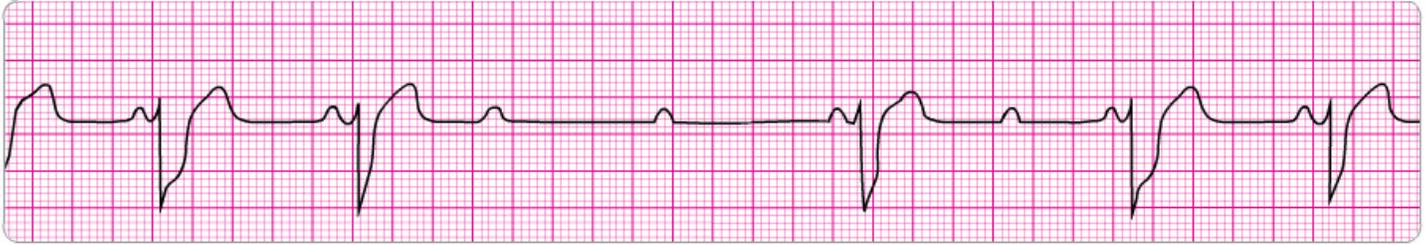
Question 8:



Please identify the rhythm by selecting the best single answer

<input type="checkbox"/>	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
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<input type="checkbox"/>	Monomorphic ventricular tachycardia	<input type="checkbox"/>	Sinus tachycardia
<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
<input type="checkbox"/>	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

Question 9:



Please identify the rhythm by selecting the best single answer

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<input type="checkbox"/>	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
<input type="checkbox"/>	Atrial flutter	<input type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
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<input type="checkbox"/>	Fine ventricular fibrillation	<input type="checkbox"/>	Sinus bradycardia
<input type="checkbox"/>	Monomorphic ventricular tachycardia	<input type="checkbox"/>	Sinus tachycardia
<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
<input type="checkbox"/>	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

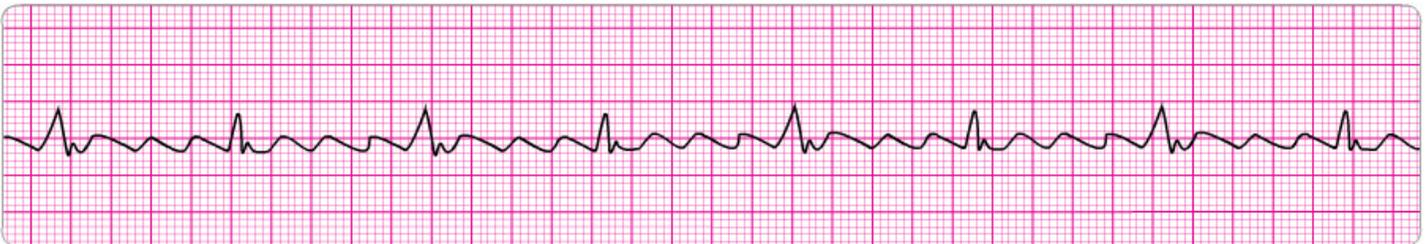
Question 10:



Please identify the rhythm by selecting the best single answer

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<input type="checkbox"/>	Atrial flutter	<input type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
<input type="checkbox"/>	Coarse ventricular fibrillation	<input type="checkbox"/>	Second-degree AV block (Mobitz II block)
<input type="checkbox"/>	Fine ventricular fibrillation	<input checked="" type="checkbox"/>	Sinus bradycardia
<input type="checkbox"/>	Monomorphic ventricular tachycardia	<input type="checkbox"/>	Sinus tachycardia
<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
<input type="checkbox"/>	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

Question 11:

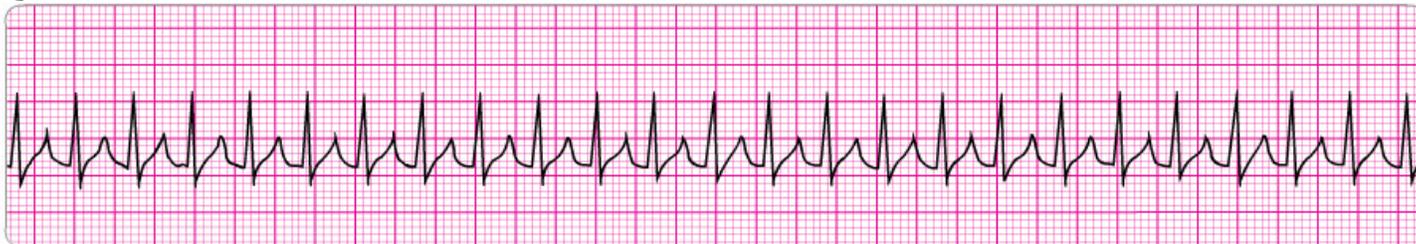


Please identify the rhythm by selecting the best single answer

<input type="checkbox"/>	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
<input type="checkbox"/>	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
<input checked="" type="checkbox"/>	Atrial flutter	<input type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
<input type="checkbox"/>	Coarse ventricular fibrillation	<input type="checkbox"/>	Second-degree AV block (Mobitz II block)
<input type="checkbox"/>	Fine ventricular fibrillation	<input type="checkbox"/>	Sinus bradycardia

<input type="checkbox"/>	Monomorphic ventricular tachycardia	<input type="checkbox"/>	Sinus tachycardia
<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
<input type="checkbox"/>	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

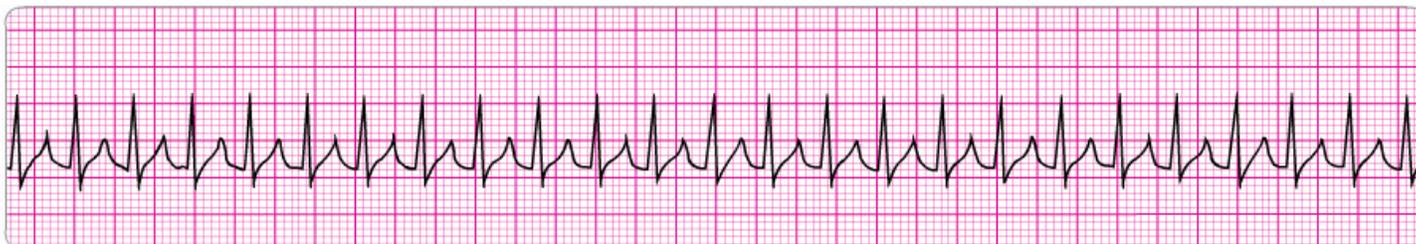
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Please identify the rhythm by selecting the best single answer

<input type="checkbox"/>	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
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<input type="checkbox"/>	Atrial flutter	<input type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
<input type="checkbox"/>	Coarse ventricular fibrillation	<input type="checkbox"/>	Second-degree AV block (Mobitz II block)
<input type="checkbox"/>	Fine ventricular fibrillation	<input type="checkbox"/>	Sinus bradycardia
<input type="checkbox"/>	Monomorphic ventricular tachycardia	<input type="checkbox"/>	Sinus tachycardia
<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
<input type="checkbox"/>	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

Question 13:



Please identify the rhythm by selecting the best single answer

<input type="checkbox"/>	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
<input type="checkbox"/>	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
<input type="checkbox"/>	Atrial flutter	<input type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
<input type="checkbox"/>	Coarse ventricular fibrillation	<input type="checkbox"/>	Second-degree AV block (Mobitz II block)
<input type="checkbox"/>	Fine ventricular fibrillation	<input type="checkbox"/>	Sinus bradycardia
<input checked="" type="checkbox"/>	Monomorphic ventricular tachycardia	<input type="checkbox"/>	Sinus tachycardia
<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
<input type="checkbox"/>	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

Question 14:



Please identify the rhythm by selecting the best single answer

<input type="checkbox"/>	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
<input type="checkbox"/>	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
<input type="checkbox"/>	Atrial flutter	<input checked="" type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
<input type="checkbox"/>	Coarse ventricular fibrillation	<input type="checkbox"/>	Second-degree AV block (Mobitz II block)
<input type="checkbox"/>	Fine ventricular fibrillation	<input type="checkbox"/>	Sinus bradycardia
<input type="checkbox"/>	Monomorphic ventricular tachycardia	<input type="checkbox"/>	Sinus tachycardia
<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
<input type="checkbox"/>	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

Question 15:



Please identify the rhythm by selecting the best single answer

<input type="checkbox"/>	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
<input type="checkbox"/>	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
<input type="checkbox"/>	Atrial flutter	<input type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
<input type="checkbox"/>	Coarse ventricular fibrillation	<input type="checkbox"/>	Second-degree AV block (Mobitz II block)
<input type="checkbox"/>	Fine ventricular fibrillation	<input type="checkbox"/>	Sinus bradycardia
<input type="checkbox"/>	Monomorphic ventricular tachycardia	<input type="checkbox"/>	Sinus tachycardia
<input checked="" type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
<input type="checkbox"/>	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

Question 16:



Please identify the rhythm by selecting the best single answer

<input checked="" type="checkbox"/>	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
<input type="checkbox"/>	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
<input type="checkbox"/>	Atrial flutter	<input type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
<input type="checkbox"/>	Coarse ventricular fibrillation	<input type="checkbox"/>	Second-degree AV block (Mobitz II block)
<input type="checkbox"/>	Fine ventricular fibrillation	<input type="checkbox"/>	Sinus bradycardia
<input type="checkbox"/>	Monomorphic ventricular tachycardia	<input type="checkbox"/>	Sinus tachycardia
<input type="checkbox"/>	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
<input type="checkbox"/>	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

Question 17:



Please identify the rhythm by selecting the best single answer

	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
X	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
	Atrial flutter	<input type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
	Coarse ventricular fibrillation	<input type="checkbox"/>	Second-degree AV block (Mobitz II block)
	Fine ventricular fibrillation	<input type="checkbox"/>	Sinus bradycardia
	Monomorphic ventricular tachycardia	<input type="checkbox"/>	Sinus tachycardia
	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

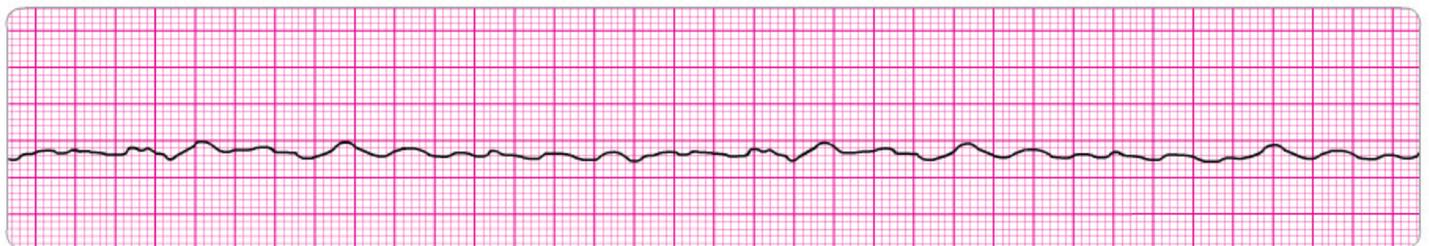
Question 18:



Please identify the rhythm by selecting the best single answer

	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
	Atrial flutter	<input type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
	Coarse ventricular fibrillation	<input type="checkbox"/>	Second-degree AV block (Mobitz II block)
	Fine ventricular fibrillation	<input type="checkbox"/>	Sinus bradycardia
	Monomorphic ventricular tachycardia	<input checked="" type="checkbox"/>	Sinus tachycardia
	Normal sinus rhythm	<input type="checkbox"/>	Third-degree AV block
	Polymorphic ventricular tachycardia	<input type="checkbox"/>	

Question 19:



Please identify the rhythm by selecting the best single answer

	Agonal rhythm/asystole	<input type="checkbox"/>	Pulseless electrical activity
	Atrial fibrillation	<input type="checkbox"/>	Reentry supraventricular tachycardia
	Atrial flutter	<input checked="" type="checkbox"/>	Second-degree AC block (Mobitz I Wenckebach)
	Coarse ventricular fibrillation	<input type="checkbox"/>	Second-degree AV block (Mobitz II block)
X	Fine ventricular fibrillation	<input type="checkbox"/>	Sinus bradycardia

	Monomorphic ventricular tachycardia		Sinus tachycardia
	Normal sinus rhythm		Third-degree AV block
	Polymorphic ventricular tachycardia		

Question 20:



Please identify the rhythm by selecting the best single answer

	Agonal rhythm/asystole		Pulseless electrical activity
	Atrial fibrillation		Reentry supraventricular tachycardia
	Atrial flutter		Second-degree AC block (Mobitz I Wenckebach)
X	Coarse ventricular fibrillation		Second-degree AV block (Mobitz II block)
	Fine ventricular fibrillation		Sinus bradycardia
	Monomorphic ventricular tachycardia		Sinus tachycardia
	Normal sinus rhythm		Third-degree AV block
	Polymorphic ventricular tachycardia		

Question 21: Which of the following statements about the use of magnesium in cardiac arrest is most accurate?

- Magnesium is indicated for shock-refractory monomorphic VT.
- X** Magnesium is indicated for VF/pulseless VT associated with torsades de pointes.
- Magnesium is contraindicated for VT associated with a normal QT interval.
- Magnesium is indicated for VF refractory to shock and amiodarone or lidocaine.

Question 22: A patient with ST-segment elevation MI has ongoing chest discomfort. Fibrinolytic therapy has been ordered. Heparin 4000 units IV bolus was administered, and a heparin infusion of 1000 units per hour is being administered. Aspirin was not taken by the patient because he had a history of gastritis treated 5 years ago. Your next action is to:

- X** Give aspirin 160 to 325 mg chewed immediately.
- Give 75 mg enteric-coated aspirin orally.
- Give 325 mg enteric-coated aspirin rectally.
- Substitute clopidogrel 300 mg loading dose.

Question 23: A patient has sinus bradycardia with a heart rate of 36/min. Atropine has been administered to a total of 3 mg. A transcutaneous pacemaker has failed to capture. The patient is confused, and her blood pressure is 110/60 mm Hg. Which of the following is now indicated?

- Give additional 1 mg atropine.
- Start dopamine 10 to 20 mcg/kg per minute.
- Give normal saline bolus 250 mL to 500 mL.
- X** Start epinephrine 2 to 10 mcg/min.

Question 24: A 62-year-old man suddenly experienced difficulty speaking and left-side weakness. He was brought to the emergency department. He meets initial criteria for fibrinolytic therapy, and a CT scan of the brain is ordered. What are the guidelines for antiplatelet and fibrinolytic therapy>

- Do not give aspirin for at least 24 hours if rtPA is administered.
- Give aspirin 160 mg and clopidogrel 75 mg orally.
- Administer heparin if CT scan is negative for hemorrhage.
- Administer aspirin 160 to 325 mg chewed immediately.

Question 25: A patient with possible ST-segment elevation MI has ongoing chest discomfort. Which of the following would be a contraindication to the administration of nitrates?

- Heart rate 90/min.
- Left ventricular infarct with bilateral rales.
- Blood pressure greater than 180 mm Hg.
- Use of a phosphodiesterase inhibitor within 12 hours

Question 26: A patient is in cardiac arrest. Ventricular fibrillation has been refractory to a second shock. Of the following, which drug and dose should be administered first by the IV/IO route?

- Epinephrine 1 mg
- Vasopressin 20 units
- Sodium bicarbonate 50 mEq
- Atropine 1 mg

Question 27: A 35-year-old woman has palpitations, light-headedness, and a stable tachycardia. The monitor shows a regular narrow-complex QRS at a rate of 180/min. Vagal maneuvers have not been effective in terminating the rhythm. An IV has been established. What drug should be administered IV?

- Lidocaine 1mg/kg
- Adenosine 6 mg
- Epinephrine 2 to 10 mcg/kg per minute
- Atropine 0.5 mg

Question 28: A patient with sinus bradycardia and heart rate of 42/min has diaphoresis and a blood pressure of 80/60 mm Hg. What is the initial dose of atropine?

- 0.1mg
- 3 mg
- 1 mg
- 0.5 mg

Question 29: A patient is in refractory ventricular fibrillation and has received multiple appropriate defibrillation shocks, epinephrine 1 mg IV twice, and an initial dose of 300 mg amiodarone IV. The patient is intubated. A second dose of amiodarone is now called for. The recommended second dose of amiodarone is:

- An endotracheal dose of 2 to 4 mg/kg.
- 300 mg IV push.
- 1 mg/kg IV push.
- An infusion of 1 to 2 mg/min.
- 150 mg IV push.

Question 30: A patient with a possible acute coronary syndrome has ongoing chest discomfort unresponsive to 3 sublingual nitroglycerin tablets. There are no contraindications, and 4 mg of morphine sulfate was administered. Shortly afterward, blood pressure falls to 88/60 mm Hg, and the patient has increased chest discomfort. You should:

- Give normal saline 250 mL to 500 mL fluid bolus.
- Give an additional 2 mg of morphine sulfate.
- Give sublingual nitroglycerin 0.4 mg.
- Start dopamine at 2 mcg/kg per minute and titrate to a systolic blood pressure reading of 100 mm Hg.

Question 31: A patient has a rapid irregular wide-complex tachycardia. The ventricular rate is 138/min. He is asymptomatic, with a blood pressure of 110/70 mm Hg. He has a history of angina. Which of the following actions is recommended?

- Giving adenosine 6 mg IV bolus.
- Seeking expert consultation.
- Giving lidocaine 1 to 1.5 mg IV bolus.
- Immediate synchronized cardioversion.

Question 32: You arrive on the scene with the code team. High-quality CPR is in progress. An AED has previously advised “no shock indicated.” A rhythm check now finds asystole. After resuming high-quality compressions, your next action is to:

- Gain IV or IO access.
- Place an esophageal-tracheal tube or laryngeal mask airway.
- Attempt endotracheal intubation with minimal interruptions in CPR.
- Call for a pulse check.

Question 33: A patient is in pulseless ventricular tachycardia. Two shocks and 1 dose of epinephrine have been given. Which is the next drug/dose to anticipate to administer?

- Amiodarone 300 mg
- Amiodarone 150 mg
- Vasopressin 40 units
- Epinephrine 3 mg
- Lidocaine 0.5 mg/kg

Question 34: Your patient has been intubated. IV/IO access is not available. Which combination of drugs can be administered by the endotracheal route?

- Vasopressin, amiodarone, lidocaine
- Amiodarone, lidocaine, epinephrine
- Epinephrine, vasopressin, amiodarone
- Lidocaine, epinephrine, vasopressin

Question 35: A patient is in cardiac arrest. Ventricular fibrillation has been refractory to an initial shock. What is the recommended route for drug administration during CPR?

- Femoral vein
- IV or IO
- Central line
- Endotracheal

- External jugular vein

Question 36: A patient is in refractory ventricular fibrillation. High-quality CPR is in progress, and shocks have been given. One dose of epinephrine was given after the second shock. An antiarrhythmic drug was given immediately after the third shock. What drug should the team leader request to be prepared for administration next?

- Escalating dose of epinephrine 3 mg.
- Second dose of epinephrine 1 mg
- Repeat the antiarrhythmic drug
- Sodium bicarbonate 50 mEq

Question 37: A 57-year-old woman has palpitations, chest discomfort, and tachycardia. The monitor shows a regular wide-complex QRS at a rate of 180/min. She becomes diaphoretic, and her blood pressure is 80/60 mm Hg. The next action is to:

- Give amiodarone 300 mg IV push.
- Perform immediate electrical cardioversion.
- Establish IV access.
- Obtain a 12-lead ECG.

Question 38: Bradycardia requires treatment when:

- The blood pressure is less than 100 mm Hg systolic with or without symptoms.
- The heart rate is less than 60/min with or without symptoms.
- The patient's 12-lead ECG show an MI.
- Chest pain or shortness of breath is present.

Question 39: Which of the following statements is most accurate regarding the administration of vasopressin during cardiac arrest?

- Vasopressin can be administered twice during cardiac arrest.
- Vasopressin is indicated for VF and pulseless VT before delivery of the first shock.
- The correct dose of vasopressin is 40 units administered by IV or IO.
- Vasopressin is recommended instead of epinephrine for the treatment of asystole.

Question 40: A patient is in cardiac arrest. High-quality chest compressions are being given. The patient is intubated and an IV has been started. The rhythm is asystole. Which is the first drug/dose to administer?

- Epinephrine 1 mg or vasopressin 40 units IV or IO.
- Atropine 1 mg IV or IO.
- Atropine 0.5 mg IV or IO.
- Epinephrine 3 mg via endotracheal route.
- Dopamine 2 to 20 mcg/kg per minute IV or IO.

Question 41: A 45-year-old woman with a history of palpitations develops light-headedness and palpitations. She has received adenosine 6 mg IV for the rhythm shown above without conversion of the rhythm. She is now extremely apprehensive. Blood pressure is 108/70 mm Hg. What is the next appropriate intervention?



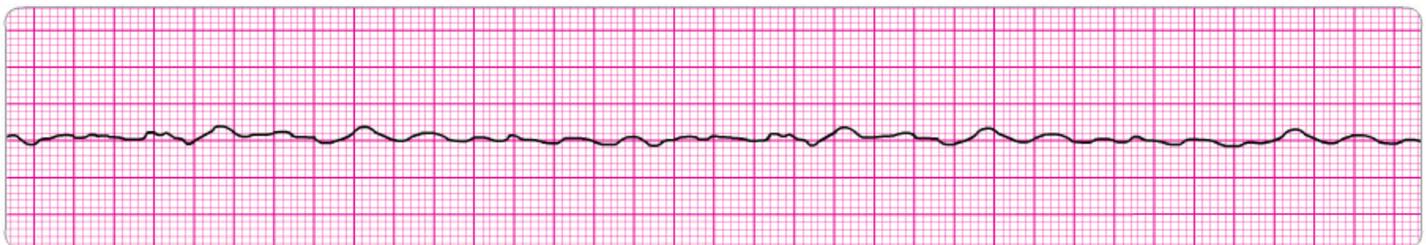
- Repeat adenosine 3 mg IV.
- Perform immediate unsynchronized cardioversion.
- Sedate and perform synchronized cardioversion.
- Repeat adenosine 12 mg IV.
- Perform vagal maneuvers and repeat adenosine 6 mg IV.

Question 42: A patient in the emergency department develops recurrent chest discomfort (8/10) suspicious for ischemia. His monitored rhythm becomes irregular as seen above. Oxygen is being administered by nasal cannula at 4 L/min, and an IV line is in place. Blood pressure is 160/96 mm Hg. There are no allergies or contraindications to any medication. You would first order:



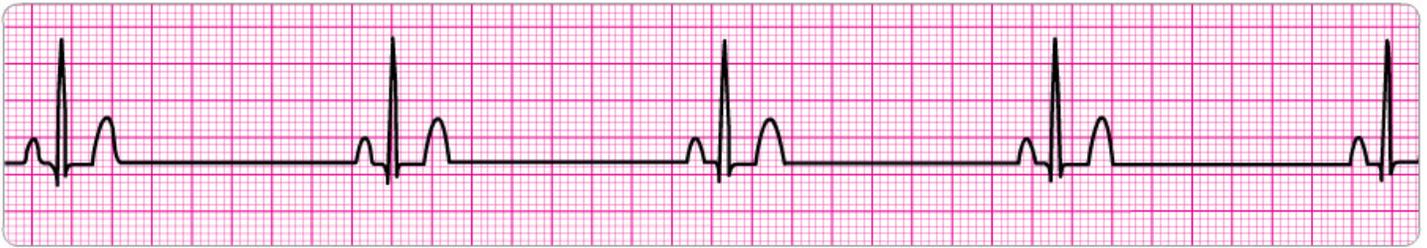
- Sublingual nitroglycerin 0.4 mg.
- Morphine sulfate 2 to 4 mg IV.
- Lidocaine 1 mg/kg IV and infusion 2 mg/min.
- Amiodarone 150 mg IV.
- IV nitroglycerin initiated at 10 mcg/min and titrated to patient response.

Question 43: Following initiation of CPR and 1 shock for VF, this rhythm is present on the next rhythm check. A second shock is given and chest compressions are resumed immediately. An IV is in place and no drugs have been given. Bag-mask ventilations are producing visible chest rise. What is your next order?



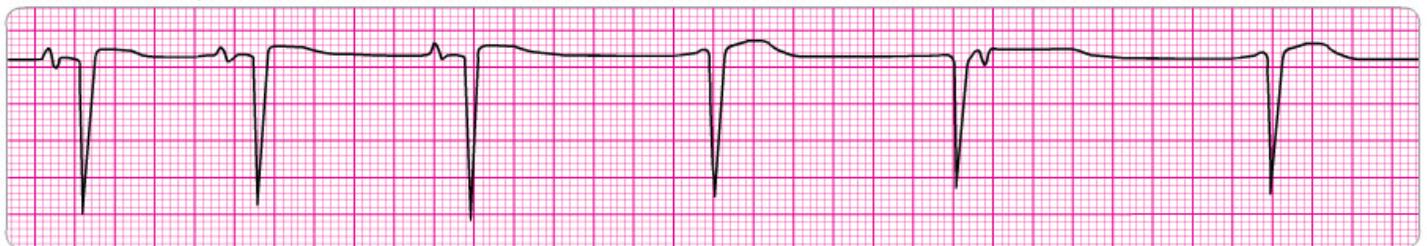
- Administer 3 sequential (stacked) shocks at 360 J (monophasic defibrillator).
- Prepare to give amiodarone 300 mg IV.
- Administer 3 sequential (stacked) shocks at 200 J (biphasic defibrillator).
- Perform endotracheal intubation; administer 100% oxygen.
- Prepare to give epinephrine 1 mg IV.

Question 44: You arrive on the scene to find a 56-year-old diabetic woman with dizziness. She is pale and diaphoretic. Her blood pressure is 80/60 mm Hg. The cardiac monitor documents the rhythm below. She is receiving oxygen at 4 L/min by nasal cannula and an IV has been established. Your next order is:



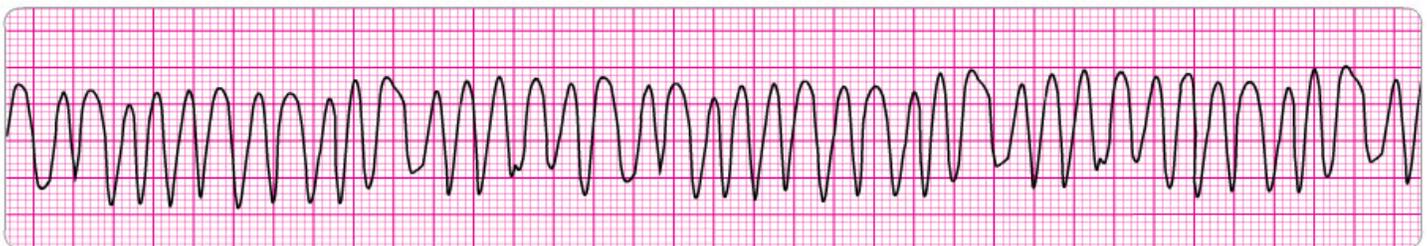
- Dopamine at 2 to 10 mcg/kg per minute.
- Sublingual nitroglycerin 0.4 mg.
- Morphine sulfate 4 mg IV.
- Atropine 0.5 mg IV.
- Atropine 1 mg IV.

Question 45: A patient becomes unresponsive. You are uncertain if a faint pulse is present with the rhythm below. What is your next action?



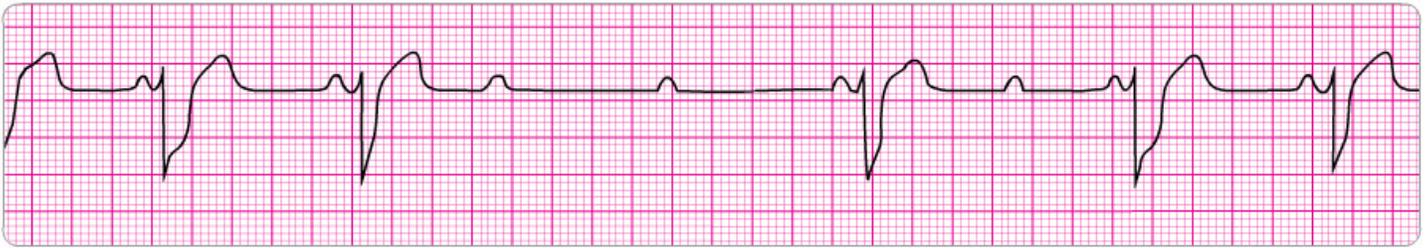
- Order transcutaneous pacing.
- Begin CPR, starting with high-quality chest compressions.
- Start an IV and give epinephrine 1 mg IV.
- Consider causes of pulseless electrical activity.
- Start an IV and give atropine 1 mg.

Question 46: This patient has been resuscitated from cardiac arrest. During the resuscitation, amiodarone 300 mg was administered. The patient developed severe chest discomfort with diaphoresis. He is now unresponsive. What is the next indicated action?



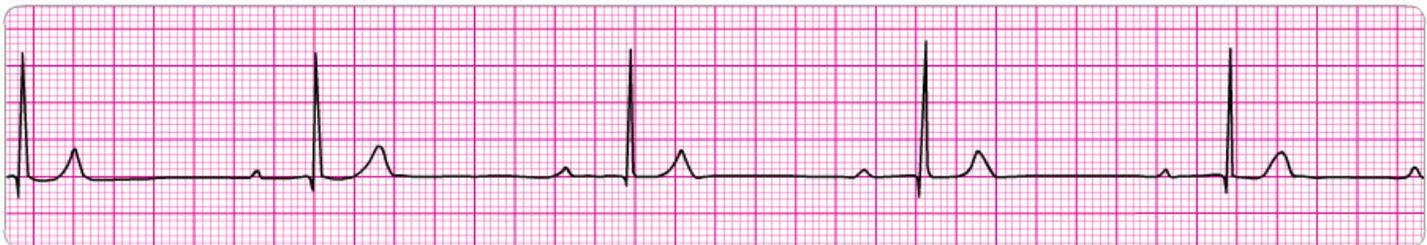
- Perform immediate synchronized cardioversion.
- Repeat amiodarone 150 mg IV.
- Give an immediate unsynchronized high-energy shock (defibrillation dose).
- Repeat amiodarone 300 mg IV.
- Give lidocaine 1 to 1.5 mg/kg IV.

Question 47: You are monitoring the patient and note the rhythm below on the cardiac monitor. She has dizziness and her blood pressure is 80/40 mm Hg. She has an IV in place. What is your next action?



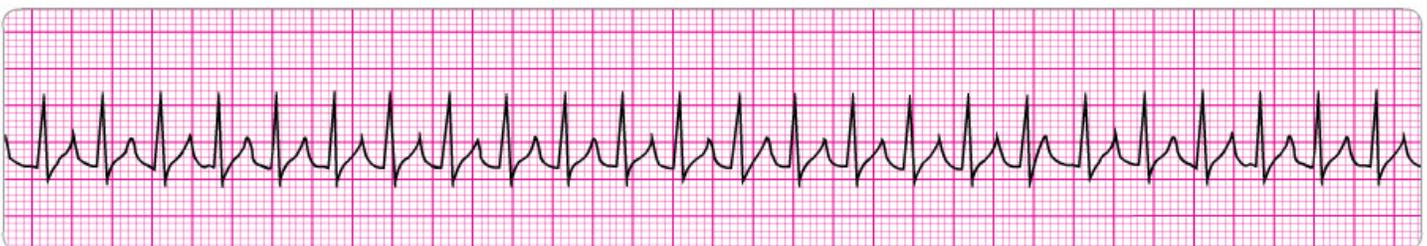
- Start transcutaneous pacing.
- Give atropine 1 mg IV.
- Give atropine 0.5 mg IV.
- Administer sedation and begin immediate transcutaneous pacing at 80/min.
- Start dopamine at 2 to 10 mcg/kg per minute and titrate to patient response.

Question 48: You arrive on the scene to find CPR in progress. Nursing staff report that the patient was recovering from a pulmonary embolism and suddenly collapsed. There is no pulse or spontaneous respirations. High-quality CPR and effective bag-mask ventilation are being provided. An IV has been initiated. What would you do now?



- Give atropine 1 mg IV.
- Give atropine 0.5 mg IV
- Order immediate endotracheal intubation.
- Give epinephrine 1 mg IV.
- Initiate transcutaneous pacing.

Question 49: A 35-year-old woman presents to the emergency department with a chief complaint of palpitations. She has no chest discomfort, shortness of breath, or light-headedness. Which of the following is indicated first?



- Perform vagal maneuvers.
- Give adenosine 12 mg IV slow push (over 1 to 2 minutes).
- Give metoprolol 5 mg IV and repeat if necessary.
- Give adenosine 3 mg IV bolus.

Question 50: You are monitoring a patient. He suddenly has the persistent rhythm shown below. You ask about symptoms and he reports that he has mild palpitations, but otherwise he is clinically stable with unchanged vital signs. What is your next action?

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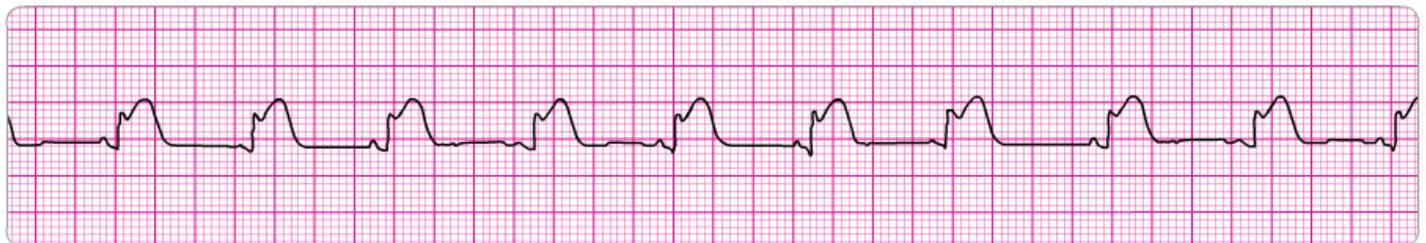
- Give an immediate synchronized shock.
- Give sedation and perform synchronized cardioversion.
- Administer magnesium sulfate 1 to 2 g IV diluted in 10 mL D5W given over 5 to 20 minutes.
- Give an immediate unsynchronized shock.
- Administer adenosine 6 mg; seek expert consultation.

Question 51: The patient suddenly becomes unconscious and has a weak carotid pulse. Cardiac monitoring, supplementary oxygen, and an IV have been initiated. The code cart with all the drugs and transcutaneous pacer are immediately available. Next you would:



- Begin transcutaneous pacing.
- Initiate dopamine at 10 to 20 mcg/kg per minute and to patient response.
- Initiate dopamine at 2 to 10 mcg/kg per minute and titrate to patient response.
- Give atropine 0.5 mg IV.
- Initiate epinephrine at 2 to 10 mcg/kg per minute.

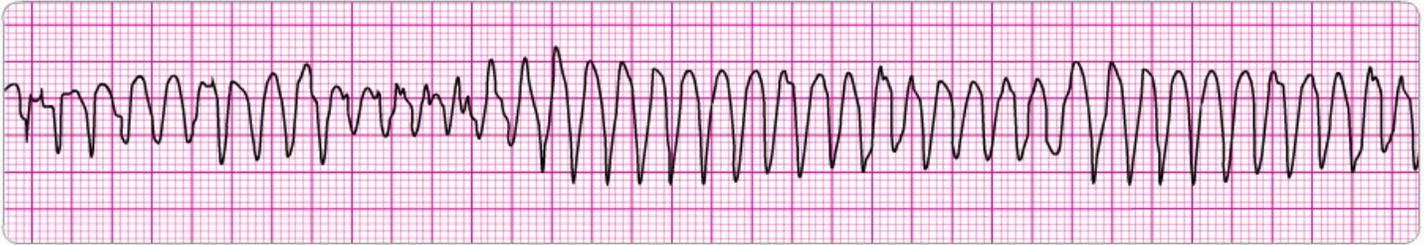
Question 52: A patient's 12-lead ECG was transmitted by the paramedics and showed an acute MI. The above findings are seen on rhythm strip when a monitor is placed in emergency department. The patient had resolution of moderate (5.10) chest pain with 3 doses of sublingual nitroglycerin. Blood pressure is 104/70 mm Hg. Which intervention below is most important, reducing in-hospital and 30-day mortality?



- Reperfusion therapy.
- IV nitroglycerin for 24 hours.
- Temporary pacing.
- Atropine 0.5 mg IV, total dose 2 mg as needed.
- Atropine 1 mg IV, total dose 3 mg as needed.

Question 53: This patient was admitted to the general medical ward with a history of alcoholism. A code is in progress and he has recurrent episodes of this rhythm. You review his chart. Notes about the 12-lead ECG say

that his baseline QT interval is high normal to slightly prolonged. He has received 2 doses of epinephrine 1 mg and 1 dose of amiodarone 300 mg IV so far. What would you order for his next medication?



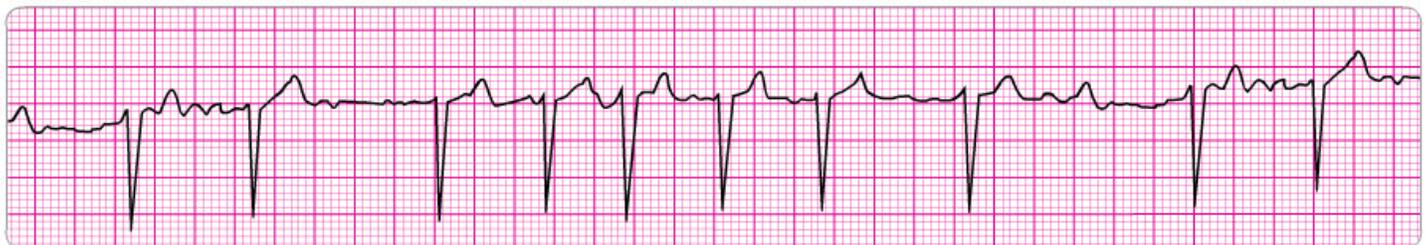
- Lidocaine 1 to 1.5 mg IV and start infusion 2 mg/min.
- Repeat amiodarone 300 mg IV.
- Repeat amiodarone 150 mg IV.
- Give sodium bicarbonate 50 mEq IV.
- Give magnesium sulfate 1 to 2 g IV diluted in 10 mL D5W given over 5 to 20 minutes

Question 54: You are the code team leader and arrive to find a patient with above rhythm and CPR in progress. Team members report that the patient was well but reported chest pain and then collapsed. She has no pulse or respirations. Bag-mask ventilations are producing visible chest rise, high-quality CPR is in progress, and an IV has been established. What would be your next order?



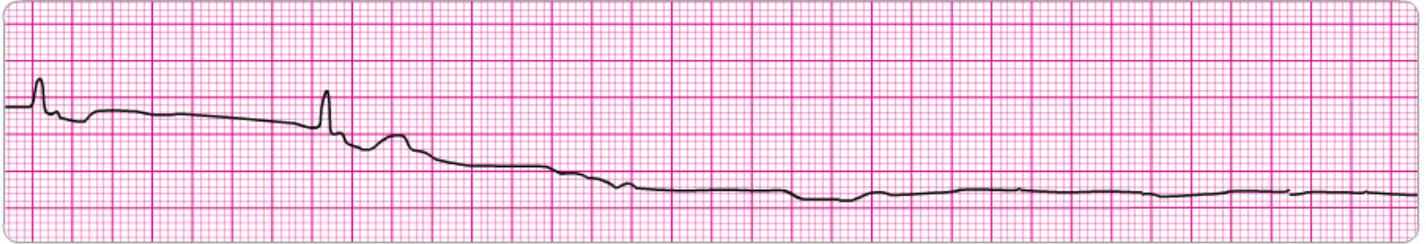
- Administer atropine 1 mg.
- Perform endotracheal intubation.
- Start dopamine at 10 to 20 mcg/kg per minute.
- Administer epinephrine 1 mg.
- Administer amiodarone 300 mg.

Question 55: A patient presents with the rhythm below and reports an irregular heartbeat. She has no other symptoms. Her medical history is significant for a myocardial infarction 7 years ago. Blood pressure is 110/70 mm Hg. What would you do at this time?



- Perform elective synchronized cardioversion with premedication.
- Continue monitoring and seek expert consultation.
- Administer nitroglycerin 0.4 sublingual or spray.
- Administer lidocaine 1mg/kg IV.
- Perform emergency synchronized cardioversion

Question 56: A patient was in refractory ventricular fibrillation. A third shock has just been administered. Your team looks to you for instructions. Your immediate next order is:



- Perform endotracheal intubation.
- Resume high-quality chest compressions.
- Check the carotid pulse.
- Give atropine 1 mg IV.
- Give amiodarone 300 mg IV.

Question 57: You are evaluating a patient with chest discomfort lasting 15 minutes during transportation to the emergency department. He is receiving oxygen and 2 sublingual nitroglycerin tablets have relieved his chest discomfort. He reports no other symptoms but appears anxious. Blood pressure is 130/70 mm Hg. You observe the rhythm below on the monitor. What is your next action?



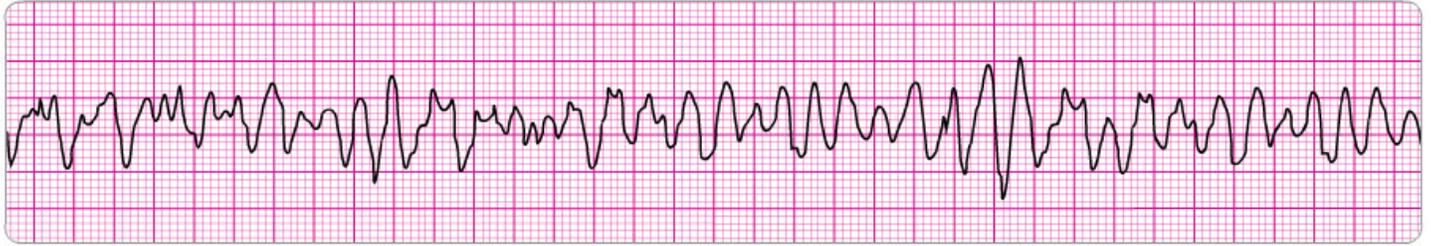
- Give atropine 0.5 mg IV.
- Initiate transcutaneous pacing (TCP).
- Start epinephrine 2 to 10 mcg/min and titrate to patient response.
- Continue monitoring the patient and seek expert consultation.
- Administer sublingual nitroglycerin 0.4 mg.

Question 58: Following resuscitation with CPR and a single shock, you observe this rhythm while preparing the patient for transport. Your patient is stable and blood pressure is 120/80 mm Hg. She is apprehensive but has no symptoms other than palpitations. At this time you would:



- Give magnesium sulfate 1 to 2 g over 20 minutes.
- Seek expert consultation.
- Give lidocaine 1 to 1.5 mg IV and start infusion.
- Give amiodarone 300 mg IV and start infusion

Question 59: You are monitoring a patient with chest discomfort who suddenly becomes unresponsive. You observe the following rhythm on the cardiac monitor. A defibrillator is present. What is your first action?



- Intubate the patient and give epinephrine 2 to 4 mg via the endotracheal tube.
- Being CPR with chest compressions for 2 minutes or about 5 cycles of compressions and ventilations.
- Establish an IV and give epinephrine 1 mg.
- Establish an IV and give vasopressin 40 units.
- Give a single shock.

Question 60: A patient has been resuscitated from cardiac arrest and is being prepared for transport. She is intubated and is receiving 100% oxygen. Blood pressure is 80/60 mm Hg. During the resuscitation, she received 2 doses of epinephrine 1 mg and 1 dose of amiodarone 300 mg IV. You now observe this rhythm on the cardiac monitor. The rhythm abnormality is becoming more frequent and increasing in number. You should order:



- Amiodarone 150 mg IV bolus; start infusion.
- A repeat dose of epinephrine 1 mg IV.
- Lidocaine 1 to 1.5 mg IV; start infusion.
- 1 to 2 L of normal saline.
- Amiodarone 300 mg IV.