

Know what steps to verify ett placement

8. The QT interval is the total time taken for ventricular depolarization and repolarization. Prolongation of the QT interval:

- 
- a. decreases the risk of lethal dysrhythmias.
  - b. usually occurs when heart rate increases.
  - c. **increases the risk of lethal dysrhythmias.**
  - d. can only be measured with irregular rhythms.

ANS: C

9. The patient has an irregular heart rhythm. To determine an accurate heart rate, the nurse first:

- 
- a. **identifies the markers on the ECG paper that indicate a 6-second strip.**
  - b. counts the number of large boxes between two consecutive P waves.
  - c. counts the number of small boxes between two consecutive QRS complexes.
  - d. divides the number of complexes in a 6-second strip by 10.

ANS: A

11. The patient is admitted with a fever and rapid heart rate. The patient's temperature is 103° F (39.4° C). The nurse places the patient on a cardiac monitor and finds the patient's atrial and ventricular rates are above 105 beats per minute. P waves are clearly seen and appear normal in configuration. QRS complexes are normal in appearance and 0.08 seconds wide. The rhythm is regular, and blood pressure is normal. The nurse should focus on providing:

- a. medications to lower heart rate.
- b. treatment to lower temperature.
- c. treatment to lower cardiac output.
- d. treatment to reduce heart rate.

ANS: B

12. The nurse is working on the night shift when she notices sinus bradycardia on the patient's cardiac monitor. The nurse should:

- a. give atropine to increase heart rate.
- b. begin transcutaneous pacing of the patient.
- c. start a dopamine infusion to stimulate heart function.
- d. assess for hemodynamic instability.

ANS: D

14. The patient is admitted with sinus pauses causing periods of loss of consciousness. The patient is asymptomatic, awake and alert, but fatigued. He answers questions appropriately. When admitting this patient, the nurse should first:

---

a. prepare the patient for temporary pacemaker insertion.

---

b. prepare the patient for permanent pacemaker insertion.

---

c. assess the patient's medication profile.

---

d. apply transcutaneous pacemaker paddles.

ANS: C

15. The patient's heart rate is 165 beats per minute. His cardiac monitor shows a rapid rate with narrow QRS complexes. The P waves cannot be seen, but the rhythm is regular. The patient's blood pressure has dropped from 124/62 to 78/30. His skin is cold and diaphoretic and he is complaining of nausea. The nurse prepares the patient for:

---

a. administration of beta-blockers.

---

b. administration of atropine.

---

c. transcutaneous pacemaker insertion.

---

d. emergent cardioversion.

ANS: D

16. The nurse is reading the cardiac monitor and notes that the patient's heart rhythm is extremely irregular and there are no discernible P waves. The ventricular rate is 90 beats per minute, and the patient is hemodynamically stable. The nurse realizes that the patient's rhythm is:

---

a. atrial fibrillation.

---

b. atrial flutter.

---

c. atrial flutter with rapid ventricular response.

---

d. junctional escape rhythm.

ANS: A

18. The patient's heart rate is 70 beats per minute, but the P waves come after the QRS complex. The nurse correctly determines that the patient's heart rhythm is:

---

a. a normal junctional rhythm.

---

b. an accelerated junctional rhythm.

---

c. a junctional tachycardia.

---

d. atrial fibrillation.

ANS: B

19. The patient is having premature ventricular contractions (PVCs). The nurse's greatest concern should be:

---

a. the proximity of the R wave of the PVC to the T wave of a normal beat.

---

b. the fact that PVCs are occurring, because they are so rare.

---

c. if the number of PVCs are decreasing.

---

d. if the PVCs are wider than 0.12 seconds.

ANS: A

20. The nurse notices ventricular tachycardia on the heart monitor. When the patient is assessed, the patient is found to be unresponsive with no pulse. The nurse should:

---

a. treat with intravenous amiodarone or lidocaine.

---

**b. begin cardiopulmonary resuscitation and advanced life support.**

---

c. provide electrical cardioversion.

---

d. ignore the rhythm since it is benign.

ANS: B

21. The nurse is talking with the patient when the monitor alarms and shows a wavy baseline without a PQRST complex. The nurse should:

---

a. defibrillate the patient immediately.

---

b. initiate basic life support.

---

c. initiate advanced life support.

---

d. assess the patient and the electrical leads.

ANS: D

22. The nurse notices that the patient has a first-degree AV block. Everything else about the rhythm is normal. The nurse should:

---

a. prepare to place the patient on a transcutaneous pacemaker.

---

b. give the patient atropine to shorten the PR interval.

---

c. monitor the rhythm and patient's condition.

---

d. give the patient an antiarrhythmic medication.

ANS: C

27. The patient has a permanent pacemaker inserted. The provider has set the pacemaker to the demand mode at a rate of 60 beats per minute. The nurse realizes that:

---

the pacemaker will pace only if the patient's intrinsic heart rate is less than 60 beats per minute.

---

b. the demand mode often competes with the patient's own rhythm.

---

c. the demand mode places the patient at risk for the R-on-T phenomenon.

---

d. the fixed rate mode is safer and is the mode of choice.

---

ANS: A

28. The patient has a permanent pacemaker in place with a demand rate set at 60 beats/min. The cardiac monitor is showing a heart rate of 44 beats/min with no pacemaker spikes. The nurse realizes this as:

---

a. normal pacemaker function.

---

b. failure to capture.

---

c. failure to pace.

---

d. failure to sense.

---

ANS: C

29. The rhythm on the cardiac monitor is showing numerous pacemaker spikes, but no P waves or QRS complexes following the spikes. The nurse realizes this as:

---

a. normal pacemaker function.

---

b. failure to capture.

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c. failure to pace.

---

d. failure to sense.

ANS: B

---

12. The nurse is working on the night shift when she notices sinus bradycardia on the patient's cardiac monitor. The nurse should:

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a. give atropine to increase heart rate.

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b. begin transcutaneous pacing of the patient.

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c. start a dopamine infusion to stimulate heart function.

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d. assess for hemodynamic instability.

ANS: D

14. The patient is admitted with sinus pauses causing periods of loss of consciousness. The patient is asymptomatic, awake and alert, but fatigued. He answers questions appropriately. When admitting this patient, the nurse should first:

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a. prepare the patient for temporary pacemaker insertion.

---

b. prepare the patient for permanent pacemaker insertion.

---

c. assess the patient's medication profile.

---

d. apply transcutaneous pacemaker paddles.

ANS: C

15. The patient's heart rate is 165 beats per minute. His cardiac monitor shows a rapid rate with narrow QRS complexes. The P waves cannot be seen, but the rhythm is regular. The patient's blood pressure has dropped from 124/62 to 78/30. His skin is cold and diaphoretic and he is complaining of nausea. The nurse prepares the patient for:

---

a. administration of beta-blockers.

---

b. administration of atropine.

---

c. transcutaneous pacemaker insertion.

---

d. emergent cardioversion.

ANS: D

17. The patient's heart rhythm shows an inverted P wave with a PR interval of 0.06 seconds. The heart rate is 54 beats per minute. The nurse recognizes the rhythm as a junctional escape rhythm, and understands that the rhythm is due to the:

---

a. loss of sinus node activity.

---

b. increased rate of the AV node.

---

c. increased rate of the SA node.

---

d. decreased rate of the AV node.

ANS: A

18. The patient's heart rate is 70 beats per minute, but the P waves come after the QRS complex. The nurse correctly determines that the patient's heart rhythm is:

---

a. a normal junctional rhythm.

---

**b. an accelerated junctional rhythm.**

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c. a junctional tachycardia.

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d. atrial fibrillation.

ANS: B

19. The patient is having premature ventricular contractions (PVCs). The nurse's greatest concern should be:

---

a. the proximity of the R wave of the PVC to the T wave of a normal beat.

---

b. the fact that PVCs are occurring, because they are so rare.

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c. if the number of PVCs are decreasing.

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d. if the PVCs are wider than 0.12 seconds.

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ANS: A

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b. begin cardiopulmonary resuscitation and advanced life support.

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c. provide electrical cardioversion.

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d. ignore the rhythm since it is benign.

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21. The nurse is talking with the patient when the monitor alarms and shows a wavy baseline without a PQRST complex. The nurse should:

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22. The nurse notices that the patient has a first-degree AV block. Everything else about the rhythm is normal. The nurse should:

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a. prepare to place the patient on a transcutaneous pacemaker.

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b. give the patient atropine to shorten the PR interval.

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c. monitor the rhythm and patient's condition.

---

d. give the patient an antiarrhythmic medication.

ANS: C

27. The patient has a permanent pacemaker inserted. The provider has set the pacemaker to the demand mode at a rate of 60 beats per minute. The nurse realizes that:

---

a. the pacemaker will pace only if the patient's intrinsic heart rate is less than 60 beats per minute.

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b. the demand mode often competes with the patient's own rhythm.

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c. the demand mode places the patient at risk for the R-on-T phenomenon.

---

d. the fixed rate mode is safer and is the mode of choice.

ANS: A

28. The patient has a permanent pacemaker in place with a demand rate set at 60 beats/min. The cardiac monitor is showing a heart rate of 44 beats/min with no pacemaker spikes. The nurse realizes this as:

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a. normal pacemaker function.

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b. failure to capture.

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c. failure to pace.

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d. failure to sense.

ANS: C

29. The rhythm on the cardiac monitor is showing numerous pacemaker spikes, but no P waves or QRS complexes following the spikes. The nurse realizes this as:

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b. failure to capture.

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c. failure to pace.

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- d. failure to sense.

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- a. prepare the patient for temporary pacemaker insertion.

- 
- b. prepare the patient for permanent pacemaker insertion.

- 
- c. assess the patient's medication profile.

- 
- d. apply transcutaneous pacemaker paddles.

ANS: C

15. The patient's heart rate is 165 beats per minute. His cardiac monitor shows a rapid rate with narrow QRS complexes. The P waves cannot be seen, but the rhythm is regular. The patient's blood pressure has dropped from 124/62 to 78/30. His skin is cold and diaphoretic and he is complaining of nausea. The nurse prepares the patient for:

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- a. administration of beta-blockers.

- 
- b. administration of atropine.

- 
- c. transcutaneous pacemaker insertion.

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d. emergent cardioversion.

ANS: D

9. The patient is having premature ventricular contractions (PVCs). The nurse's greatest concern should be:

---

a. the proximity of the R wave of the PVC to the T wave of a normal beat.

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b. the fact that PVCs are occurring, because they are so rare.

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c. if the number of PVCs are decreasing.

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ANS: A

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---

a. treat with intravenous amiodarone or lidocaine.

---

b. begin cardiopulmonary resuscitation and advanced life support.

---

c. provide electrical cardioversion.

---

d. ignore the rhythm since it is benign.

ANS: B

2. The nurse notices that the patient has a first-degree AV block. Everything else about the rhythm is normal. The nurse should:

---

a. prepare to place the patient on a transcutaneous pacemaker.

---

b. give the patient atropine to shorten the PR interval.

---

c. monitor the rhythm and patient's condition.

---

d. give the patient an antiarrhythmic medication.

ANS: C

. The patient has a permanent pacemaker in place with a demand rate set at 60 beats/min. The cardiac monitor is showing a heart rate of 44 beats/min with no pacemaker spikes. The nurse realizes this as:

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a. normal pacemaker function.

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b. failure to capture.

---

c. failure to pace.

---

d. failure to sense.

ANS: C

---

29. The rhythm on the cardiac monitor is showing numerous pacemaker spikes, but no P waves or QRS complexes following the spikes. The nurse realizes this as:

---

a. normal pacemaker function.

---

b. failure to capture.

---

c. failure to pace.

---

d. failure to sense.

ANS: B

1. A patient has coronary artery bypass graft surgery and is transported to the surgical intensive care unit at noon. He is placed on mechanical ventilation. Interpret his initial arterial blood gas levels:

pH 7.31

PaCO<sub>2</sub> 48 mm Hg

Bicarbonate 22 mEq/L

PaO<sub>2</sub> 115 mm Hg

O<sub>2</sub> saturation 99%

---

a. Normal arterial blood gas levels with a high oxygen level

---

b. Partly compensated respiratory acidosis, normal oxygen

---

c. Uncompensated metabolic acidosis with high oxygen levels

---

d. Uncompensated respiratory acidosis; hyperoxygenated

ANS: D

6. A patient's status worsens and needs mechanical ventilation. The pulmonologist wants the patient to receive 10 breaths/min from the ventilator but wants to encourage the patient to breathe spontaneously in between the mechanical breaths at his own tidal volume. This mode of ventilation is called:

---

a. assist/control ventilation

---

b. controlled ventilation

---

c. intermittent mandatory ventilation

---

d. positive end-expiratory pressure

ANS: C

9. Neuromuscular blocking agents are used in the management of some ventilated patients. Their primary mode of action is:

---

a. analgesia.

---

b. anticonvulsant.

---

c. paralysis.

---

d. sedation.

---

ANS: C

12. Which of the following devices is best suited to deliver 65% oxygen to a patient who is spontaneously breathing?

---

a. Face mask with non-rebreathing reservoir

---

b. Low-flow nasal cannula

---

c. Simple face mask

---

d. Venturi mask

ANS: A

20. A patient presents to the emergency department demonstrating agitation and complaining of numbness and tingling in his fingers. His arterial blood gas levels reveal the following: pH 7.51, PaCO<sub>2</sub> 25, HCO<sub>3</sub> 25. The nurse interprets these blood gas values as:

---

a. compensated metabolic alkalosis.

---

b. normal values.

---

c. uncompensated respiratory acidosis.

---

d. uncompensated respiratory alkalosis.

ANS: D

21. Positive end-expiratory pressure (PEEP) is a mode of ventilatory assistance that produces the following condition:

---

a. Each time the patient initiates a breath, the ventilator delivers a full preset tidal volume.

---

For each spontaneous breath taken by the patient, the tidal volume is determined by the

b. patient's ability to generate negative pressure.

---

c. The patient must have a respiratory drive, or no breaths will be delivered.

---

There is pressure remaining in the lungs at the end of expiration that is measured in cm

d. H<sub>2</sub>O.

ANS: D

27. The nurse is caring for a mechanically ventilated patient and notes the high pressure alarm sounding. The nurse cannot quickly identify the cause of the alarm and notes the patient's oxygen saturation is decreasing and heart rate and respiratory rate are increasing. The nurse's priority action is to:

---

a. ask the respiratory therapist to get a new ventilator.

---

b. call the rapid response team to assess the patient.

---

c. continue to find the cause of the alarm and fix it.

---

d. manually ventilate the patient while calling for a respiratory therapist.

ANS: D

29. When assessing the patient for hypoxemia, the nurse recognizes that an early sign of the effect of hypoxemia on the *cardiovascular* system is:

---

a. heart block.

---

b. restlessness.

---

c. tachycardia.

---

d. tachypnea.

ANS: C

3. The nurse is assisting with endotracheal intubation and understands correct placement of the endotracheal tube in the trachea would be identified by which of the following? (*Select all that apply.*)

---

a. Auscultation of air over the epigastrium

---

b. Equal bilateral breath sounds upon auscultation

---

c. Position above the carina verified by chest x-ray

---

d. Positive detection of carbon dioxide (CO<sub>2</sub>) through CO<sub>2</sub> detector devices

ANS: B, C, D

2. The patient with acute respiratory distress syndrome (ARDS) would exhibit which of the following symptoms?

---

a. Decreasing PaO<sub>2</sub> levels despite increased FiO<sub>2</sub> administration

---

b. Elevated alveolar surfactant levels

---

c. Increased lung compliance with increased FiO<sub>2</sub> administration

---

d. Respiratory acidosis associated with hyperventilation

ANS: A

7. The basic underlying pathophysiology of acute respiratory distress syndrome results from:

---

a. a decrease in the number of white blood cells available.

---

b. damage to the right mainstem bronchus.

---

c. damage to the type II pneumocytes, which produce surfactant.

---

d. decreased capillary permeability.

ANS: C

14. The nurse is caring for a postoperative patient with chronic obstructive pulmonary disease (COPD). Which assessment would be a cue to the patient developing postoperative pneumonia?

---

a. Bradycardia

---

b. Change in sputum characteristics

---

c. Hypoventilation and respiratory acidosis

---

d. Pursed-lip breathing

---

ANS: B

18. A patient at high risk for pulmonary embolism is receiving Lovenox. The nurse explains to the patient:

---

a. "I'm going to contact the pharmacist to see if you can take this medication by mouth."

---

b. "This injection is being given to prevent blood clots from forming."

---

c. "This medication will dissolve any blood clots you might get."

---

d. "You should not be receiving this medication. I will contact the physician to get it stopped."

---

ANS: B

22. The nurse is assessing a patient. Which assessment would cue the nurse to the potential of acute respiratory distress syndrome (ARDS)?

---

a. Increased oxygen saturation via pulse oximetry

---

b. Increased peak inspiratory pressure on the ventilator

---

---

c. Normal chest radiograph with enlarged cardiac structures

---

d. PaO<sub>2</sub>/FiO<sub>2</sub> ratio > 300

ANS: B

Which of the following statements is true regarding oral care for the prevention of ventilator-associated pneumonia (VAP)? *(Select all that apply.)*

---

a. Tooth brushing is performed every 2 hours for the greatest effect.

---

b. Implementing a comprehensive oral care program is an intervention for preventing VAP.

---

c. Oral care protocols should include oral suctioning and brushing teeth.

---

d. Protocols that include chlorhexidine gluconate have been effective in preventing VAP.

ANS: B, C, D

The nurse chooses which method and concentration of oxygen administration until intubation is established in a patient who has sustained a cardiopulmonary arrest?

---

a. Bag-valve-mask at FiO<sub>2</sub> of 100%

---

b. Bag-valve-mask at FiO<sub>2</sub> of 50%

---

c. Mouth-to-mask ventilation with supplemental oxygen

- 
- d. Non-rebreather mask at FiO<sub>2</sub> of 100%

ANS: A

4. The patient has been admitted to a critical care unit with a diagnosis of acute myocardial infarction. Suddenly his monitor alarms and the screen shows a flat line. What action should the nurse take first?

- 
- a. Administer epinephrine by intravenous push.
- 
- b. Begin chest compressions.
- 
- c. Check patient for unresponsiveness.
- 
- d. Defibrillate at 360 J.

ANS: C

5. During a code, the nurse would place paddles for anterior defibrillation in what locations?

- 
- Second intercostal space, left sternal border and fourth intercostal space, left midclavicular
- a. line

- 
- Second intercostal space, right sternal border and fourth intercostal space, left midaxillary
- b. line

- 
- Second intercostal space, right sternal border and fifth intercostal space, left midclavicular
- c. line

---

Fourth intercostal space, right sternal border and fifth intercostal space, left midclavicular  
d. line

ANS: C

8. The patient is diagnosed with abrupt onset of supraventricular tachycardia (SVT). The nurse prepares which medication that has a short half-life and is recommended to treat symptomatic SVT?

---

a. Adenosine

---

b. Amiodarone

---

c. Diltiazem

---

d. Procainamide

ANS: A

11. The monitor technician notifies the nurse “stat” that the patient has a rapid, chaotic rhythm that looks like ventricular tachycardia. What is the nurse’s first action?

---

a. Call a code overhead.

---

b. Check the patient immediately.

---

c. Go to the nurse’s station and look at the rhythm strip.

---

d. Take the crash cart to the room.

---

ANS: B

14. A patient develops frequent ventricular ectopy. The nurse prepares to administer which drug?

---

a. Adenosine

---

b. Atropine

---

c. Lidocaine

---

d. Magnesium

ANS: C

16. The nurse needs to evaluate arterial blood gases before the administration of which drug?

---

a. Calcium chloride

---

b. Magnesium sulfate

---

c. Potassium

---

d. Sodium bicarbonate

ANS: D

21. What is the major reason for using a treatment to lower body temperature after cardiac arrest to promote better neurological recovery?

- a. Hypothermia decreases the metabolic rate by 7% for each decrease of 1° C.
- b. Lower body temperatures are beneficial in patients with low blood pressure.
- c. Temperatures of 40° C may reduce neurological impairment.
- d. The lower body temperature leads to decreased oxygen delivery.

ANS: A

1. A patient has been successfully converted from ventricular tachycardia with a pulse to a sinus rhythm. Upon further assessment, it is noted that she is hypotensive. The appropriate treatment for her hypotension may include:(*Select all that apply.*)

- a. adenosine.
- b. dopamine infusion.
- c. magnesium.
- d. normal saline infusion.
- e. sodium bicarbonate.

ANS: B, D

. Which of the following are documented as part of the cardiopulmonary arrest record? (*Select all that apply.*)

---

a. Medication administration times

---

b. Defibrillation times, joules, outcomes

---

c. Rhythm strips of cardiac rhythm(s) noted

---

d. Signatures of recorder and other personnel

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ANS: A, B, C, D

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