

ATI RN COMPREHENSIVE PREDICTOR 2019 FORM A

1. The nurse suspects the patient has increased afterload. Which piece of equipment should the nurse obtain to determine the presence of this condition?
- a. Pulse oximeter

 - b. Oxygen cannula
 - c. Blood pressure cuff

 - d. Yankauer suction tip catheter

ANS: C

A blood pressure cuff is needed. The diastolic aortic pressure is a good clinical measure of afterload. Afterload is the resistance to left ventricular ejection. In hypertension the afterload increases, making cardiac workload also increase. A pulse oximeter is used to monitor the level of arterial oxygen saturation; it will not help determine increased afterload. While an oxygen cannula may be needed to help decrease the effects of increased afterload, it will not help determine the presence of afterload. A Yankauer suction tip catheter is used to suction the oral cavity.

2. A patient has heart failure and cardiac output is decreased. Which formula can the nurse use to calculate cardiac output?
- a. Myocardial contractility \times Myocardial blood flow

 - b. Ventricular filling time/Diastolic filling time
 - c. Stroke volume \times Heart rate

 - d. Preload/Afterload

ANS: C

Cardiac output can be calculated by multiplying the stroke volume and the heart rate. The other options are not measures of cardiac output.

3. A patient's heart rate increased from 94 to 164 beats/min. What will the nurse expect?
- a. Increase in diastolic filling time
 - b. Decrease in hemoglobin level
 - c. Decrease in cardiac output
 - d. Increase in stroke volume

ANS: C

With a sustained heart rate greater than 160 beats/min, diastolic filling time decreases, decreasing stroke volume and cardiac output. The hemoglobin level would not be affected.

4. The nurse is careful to monitor a patient's cardiac output. Which goal is the nurse trying to achieve?
- a. To determine peripheral extremity circulation
 - b. To determine oxygenation requirements
 - c. To determine cardiac dysrhythmias
 - d. To determine ventilation status

ANS: A

Cardiac output indicates how much blood is being circulated systemically throughout the body to the periphery. The amount of blood ejected from the left ventricle each minute is the cardiac output. Oxygen status would be determined by pulse oximetry and the presence of cyanosis. Cardiac dysrhythmias are an electrical

impulse monitored through ECG results. Ventilation status is measured by respiratory rate, pulse oximetry, and capnography. Capnography provides instant information about the patient's ventilation. Ventilation status does not depend solely on cardiac output.