TEST EN BOMBA

REFRESH YOUR KNOWLEDGE

1. A PATIENT WHO IS CANNULATED WITH A VENOUS CANNULA IN THE RIGHT ATRIUM AND AN ARTERIAL CANNULA IN THE RIGHT ATRIUM IS IN:

a) Venoarterial ECMO.
b) Venovenous ECMO

2. WHAT ARE THE MOST FREQUENT MECHANICAL COMPLICATIONS IN THE ECMO CIRCUIT?

a) Presence of blood clots in the system.
b) Presence of air in the system.
c) Problems with the cannulas.
d) All of the above.

3. 1 GRAM OF HEMOGLOBIN TRANSPORTS:

a) 1.90 mL of O_2.
b) 1.36 mL of O_2.
c) 210 mL of O_2.

4. IF THE DELTA P PRESSURE REFERS TO THE DIFFERENCE BETWEEN PERFUSION PRESSURE AND PRE-MEMBRANE PRESSURE, WHICH PRESSURE IS EXPECTED TO BE HIGHER?

a) The pre-membrane pressure.
b) The post-membrane pressure.

5. WHICH OF THE FOLLOWING SITUATIONS WOULD RESULT IN DECREASED VENOUS RETURN IN CENTRAL CANNULATION ECMO?

a) Pulmonary edema.
b) Cardiac tamponade.
c) Kinking of the arterial cannula.
d) Hypervolemia.

6. WHAT IS THE PURPOSE OF THE P50 REPORTED BY ARTERIAL GASES?

a) It is the oxygen tension at which hemoglobin is 50% saturated.
b) It is a reference measure to understand the behavior of a sample of 50 other patients in this situation.
c) It represents the deviation of the hemoglobin dissociation curve by 50%.
d) It is a reference to oxygen saturation at a pressure of 50 kPa.

7. THE STATIC PRIMING OF AN OXYGENATOR REFERS TO:

a) The priming of the oxygenator through the recirculation line.
b) The minimum operational level at a flow rate of 2.4 L/min/m2.
c) The minimum volume of fluid in the oxygenator after priming without flow through it.
d) The level of priming necessary to achieve occlusivity or calibration

8. POSSIBLE CAUSES OF ELEVATED CO_2:

a) Hypothermia, vasoconstriction, increased venous saturation.
b) Malignant hyperthermia, release of a tourniquet, thyrotoxicosis, fever.
c) Increased minute ventilation volume, low bicarbonate levels.

9. THE ARTERIAL OXYGEN CONTENT IS:

a) The fraction of inspired oxygen (FiO2) provided by the blender of the extracorporeal circulation device.
b) The sum of the oxygen bound to hemoglobin and the oxygen dissolved in plasma.

10. VO_2 REFERS TO:

a) Oxygen supply shown by the arterial saturation.
b) Oxygen consumption reflected by the difference in arteriovenous oxygen content multiplied by the cardiac output.

11. THE APPROPRIATE CEREBRAL PERFUSION PRESSURE FOR ADULTS RANGES BETWEEN:

a) 60 and 70 mmHg.
b) 80 and 100 mmHg
c) < 50 mmHg

12. CEREBRAL SELF-REGULATION DEPENDS ON:

a) Partial pressure of CO2.
b) Mean arterial pressure
c) pH.
d) All of the above.

ANSWERS: 1:B; 2:D ; 3:B ; 4:A; 5:B; 6:A; 7:C; 8:B; 9:B; 10:B; 11:A; 12:D.