

Role of Mixed Venous Oxygen Saturation in I.C.U Patients

Essay

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

لَسْبَدَانِكَ لَا عِلْمَ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

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List of Abbreviation

a/A	Ratio PaO ₂ /PAO ₂
A-a	Gradient PAO ₂ - PaO ₂ Alveolar-arterial Partial Pressure Oxygen Gradient
ATP	Adenosine triphosphate
CaO₂	Content of oxygen in arterial blood
CCO	Continuous cardiac output
CCo₂	Oxygen concentration in maximally saturated pulmonary end-capillary blood
CCU	Coronary care unit
CI	Cardiac index
cmH₂O	Centimeters of water
CO	Cardiac output
CO₂	Carbon dioxide;
CPAP	Continuous positive airway pressure
CvO₂	Content of oxygen in venous blood
CVP	Central venous pressure
DO₂	Oxygen delivery
DO₂crit	Critical oxygen delivery
DO₂I	Oxygen Delivery Index
2,3-DPG	Diphosphoglycerate
EGDT	Early Goal Directed Therapy
EMD	Electromechanical dissociation
ERO₂	Oxygen extraction ratio
ERO₂crit	Critical oxygen extraction ratio
FiO₂	Fraction of inspired oxygen;
Hb	Hemoglobin

List of Abbreviation

HbO₂	Oxyhemoglobin
ICU	Intensive care unit
Kpa	Kilopascal
LV	Left ventricle
LVEDP	Left ventricular end diastolic pressure
LVSWI	Left ventricular stroke work index
MAP	Mean arterial pressure
ml	Milliliter
mmHg	Millimeter of mercury
O₂	Oxygen
OEC	Oxyhemoglobin dissociation curve
P₅₀	At which 50% of the hemoglobin is saturated
PA	Pulmonary artery
PAC	Pulmonary artery catheter
PaCO₂	Partial pressure of carbon dioxide in arterial blood
PAO₂	Partial pressure of oxygen in alveoli
PaO₂	Partial pressure of oxygen in arterial blood
PAP	Pulmonary artery pressure I.J.V.
PAWP	Pulmonary artery wedge pressure
PCO₂	Partial pressure of carbon dioxide
PCWP	Pulmonary capillary wedge pressure
PeCO₂	Mixed expired PCO ₂
PEEP	Positive end-expiratory pressure
PeO₂	Mixed inspired PO ₂
PetCO₂	End-tidal carbon dioxide

List of Abbreviation

PFTs	Pulmonary function tests
PHT	Hesymbol relating the hydrogen ion concentration or activity of a solution to that of a given standard solution.
pHi	Gastric pH
PIO₂	Inspired PO ₂
PO₂	Partial pressure of oxygen (O ₂) in the blood
PvO₂	Partial pressure of oxygen in venous blood.
PVRI	Pulmonary vascular resistance index
Qs/Qt	Intrapulmonary shunt
QS/QT	Shunt fraction
Qt	Cardiac Output
RA	Right atrium
RBCs	Red blood cells
RO₂	Oxygen reserve
ROSC	Return of spontaneous circulation
RQ	Respiratory Quotient
RV	Right ventricle
RVEDV	Right ventricular end diastolic volume
RVEF	Right ventricular ejection fraction
RVSWI	Right ventricular stroke work index
SaO₂	Arterial oxygen saturation
ScvO₂	Oxygen saturation of central venous blood
SVI	Stroke volume index
SvO₂	Mixed venous oxygen saturation
SVRI	Systemic vascular resistance index
T	Temperature

List of Abbreviation

TB	Blood Temperature
TI	Injectate temperature
V/Q	Ventilation-perfusion
VIP	Variable infusion port
VO₂	Oxygen consumption
vol%	The amount of O ₂ in milliliters that is in 100 mL of blood (vol% = mL O ₂ / 100 mL blood).



Introduction

