Comparison of the Effect of Norepinephrine and Dopamine on Cerebral Haemodynamics in Severely Brain Injured Patients Using Transcranial Doppler

Thesis

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Hend Abdelsabour

Dedication

To

My Soul Brother

Mohammed Abd El-Sabour

List of Abbreviations

Abb.		Meaning
ABG	:	Arterial blood gas
ACA	:	Anterior cerebral artery
AComA	:	Anterior communicating arteries
AMP	:	Adenosine monophosphate
AP	:	Arterial pressure
ATP	:	Adenosine triphosphate
AU	:	Arbitrary unit
$AVDO_2$	:	Arteriovenous difference in oxygen
BBB	:	Blood brain barrier
BP	:	Blood pressure
Ca^{2+}	:	Calcium
cAMP	:	Cyclic adenosine monophosphate
CBF	:	Cerebral blood flow
CBV	:	Cerebral blood volume
CI	:	Cardiac index
$CMRO_2$	:	Cerebral metabolic rate of oxygen
CO	:	Cardiac output
CO_2	:	Carbon dioxide
CO_2	:	Carbon dioxide
CPP	:	Cerebral perfusion pressure
CSF	:	Cerebrospinal fluid
CT	:	Computed tomogram
CTA	:	Computerized tomography angiography
CVP	:	Central venous pressure
CVR	:	Cerebrovascular resistance
DA	:	Dopamine

List of Abbreviations (Cont.)

Abb.		Meaning
DO_2	:	Oxygen delivery
DR	:	Dopaminergic receptor
eCPP	:	Estimating cerebral perfusion pressure
EDV	:	End-diastolic velocity
FV	:	Flow velocity
FVd	:	Diastole flow velocity
FVmax	:	Maximum FV
FVs	:	Systole flow velocity
GCS	:	Glasgow coma scale
HR	:	Heart rate
ICA	:	Internal carotid artery
ICH	:	Intracranial hemorrhage
ICP	:	Intracranial pressure
ICU	:	Intensive care unit
IL	:	Interleukin
IV	:	Intravenous
K	:	Potassium
LDF	:	Laser Doppler flowmetry
LOS	:	Length of stay
LVSWI	:	Left ventricle stroke work index
MAP	:	Mean arterial pressure
MB	:	Methylene blue
MCA	:	Middle cerebral artery
MHz	:	Mega Hertz
MRI	:	Magnetic resonance Imaging
MV	:	Mean velocity
Na	:	Sodium
NE	:	Norepinephrine

List of Abbreviations (Cont.)

Abb.		Meaning
OA	:	Ophthalmic artery
OEF	:	Oxygen extraction fraction
$PaCO_2$	:	Arterial carbon dioxide tension
PaO_2	:	Arterial oxygen tension
$PbtO_2$	:	Brain oxygen tension
PCA	:	Posterior cerebral artery
PComA	:	Posterior communicating arteries
PCWP	:	Pulmonary capillary wedge pressure
pHi	:	The gastric intramucosal PH
PI	:	Pulsatility index
PVR	:	pulmonary vascular resistance
RVSWI	:	Right ventricle stroke work index
SAH	:	Subarachnoid hemorrhage
SaO_2	:	Arterial oxygen saturation
SjO_2	:	Jugular bulb oxygen saturation
SV	:	Peak systolic velocity
SVI	:	Stroke volume index
SVR	:	Systemic vascular resistance
TBI	:	Traumatic brain injury
TCD	:	Transcranial doppler
TD	:	Thermal diffusion
UCP 2	:	Mitochondrial uncoupling protein
UO	:	Urine output
V1	:	Vasopressin type 1
VA	:	Vertebral arteries
VO_2	:	Oxygen uptake
vWF	:	von willebrand factor
ZFP	:	Zero-flow pressure

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