Ultrasound in Pediatric Anesthesia

An Essay

Submitted for partial fulfillment of Master Degree in Anesthesia

By

Sherif Mahrous Sayed Ali (M.B.B.CH.)

Under Supervision Of

Prof. Dr. Seif Al Islam Abd Elaziz

Professor of Anesthesia, Intensive Care and Pain Management Faculty of Medicine Ain Shams University

Prof. Dr. Sherif Farouk Ibrahim

Professor of Anesthesia, Intensive Care and Pain Management Faculty of Medicine Ain Shams University

Dr. Hanaa Mohamed Abd Allah ElGendy

Lecturer of Anesthesia, Intensive Care and Pain Management Faculty of Medicine Ain Shams University

> Faculty of medicine Ain Shams University 2014

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List of Abbreviations

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2,3-DPG	2,3-Diphosphoglycerate
2D	Two-dimensional
3D	Three-dimensional
A	Articular process
AA	Axillary artery
AAG	α_1 -acid glycoprotein
ABL	Allowable blood loss
AL	Adductor longus
AM	Adductor magnus
ASAS	Anterior spinal artery syndrome
ASIS	Anterior superior iliac spine
AV	Axillary vein
BA	Brachial artery
BAv	Basilic vein
BBB	Blood Brain Barrier
BCR	Brachioradialis
BF	Biceps femoris
BRa	Brachial artery
BRv	Brachial vein
С	Corocoid process
C5	Cervical vertebra number five
CA	Carotid artery
CBF	Cerebral blood flow
CC	Closing capacity
CCA	Common carotid artery
CDF	Color doppler flow
CL	Clavicle
cm	Centimeter
Cmax	Peak plasma concentration
CRB	Coracobrachialis muscle
CSF	Cerebrospinal fluid
CT	Computerized tomography
CVCs	Central venous catheters
dB	Decibel
DGC	Depth-gain compensation
DUS	Dynamic ultrasound
	•

ECF Extracellular fluid ECG Electrocardiogram ECRL Extensor carpi radialis longus ESM Erector spinae muscle f Frequency FA Femoral artery FCU Flexor carpi ulnaris FDP Flexor digitorum profundus FDS Flexor digitorum superficialis FPL Flexor pollicis longus FR First rib FRC Functional residual capacity FV Femoral vein Gen General GFR Glomerular Filtration Rate GM Gluteus maximus HbF Fetal hemoglobin HR Heart rate hr Hour HSA Human serum albumin Hz Hertz UV Internal jugular vein IO Internal oblique IP In-plane IV Intravenous IVC Inferior vena cava Kcal Kilocalory Kcl Potassium chloride kg Kilogram kHz Kilohertz L Liter L1 Lumber vertebra number one LA Local anesthetic LM Landmark MCN Musculocutaneous nerve MHz Megahertz min Minute mL Milliliter mm Millilineter	EBV	Estimate of Blood Volume
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IVC Inferior vena cava Kcal Kilocalory Kcl Potassium chloride kg Kilogram kHz Kilohertz L Liter L1 Lumber vertebra number one LA Local anesthetic LM Landmark MCN Musculocutaneous nerve MHz Megahertz min Minute mL Milliliter	IP	In-plane
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LM Landmark MCN Musculocutaneous nerve MHz Megahertz min Minute mL Milliliter	L1	Lumber vertebra number one
MCN Musculocutaneous nerve MHz Megahertz min Minute mL Milliliter	LA	Local anesthetic
MHz Megahertz min Minute mL Milliliter	LM	Landmark
min Minute mL Milliliter	MCN	Musculocutaneous nerve
mL Milliliter	MHz	Megahertz
	min	Minute
mm Millimeter	mL	Milliliter
	mm	Millimeter

mm Hg	Millimeters of mercury
MN	Median nerve
mol	Mole
mos	Months
N	Number
Nacl	Sodium chloride
NICE	The National Institute for Clinical Excellence
OOP	Out-of plane
PA	Popliteal artery
Pec	Pectoralis
Pen	Penetration
PICCS	Peripherally inserted central catheters
PRAN	The Pediatric Regional Anesthesia Network
PZT	Lead Zirconium Titanate
QF	Quadratus femoris
RA	Radial artery
RN	Radial nerve
S	Spinous process
S1	Sacral vertebra number one
SA	Scalenus anterior
SCA	Subclavian artery
SCM	Sternocleidomastoid muscle
SCV	Subclavian vein
sec	Second
SM	Scalenus medius
SN	Sternal notch
SONAR	Sound Navigation and Ranging
SUS	Static ultrasound
SVC	Superior vena cava
T	Thoracic vertebra
TA	Transverse abdominis
TAP	Transverses abdominis plane
TGC	Time gain compensation
THI	Tissue harmonic imaging
THY	Thyroid
TLC	Total lung capacity
Tmax	Time to reach peak plasma concentration
TP	Transverse process
UA	Ulnar artery
US	Ultrasound