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Anesthetic Considerations for Pediatric Laparoscopic Surgery

Essay

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in Anesthesiology*

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List of Abbreviations

Abb.	Full term
ABG	Arterial blood gases
ABL	Allowable blood loss
ADH	Antidiuretic hormone
AHA	American Heart Association
ARDS	Acute respiratory distress syndrome
ASA	American Society of Anesthesiologists
BBB	Blood brain barrier
BUN	Blood urea nitrogen
CBF	Cerebral blood flow
CBF	Cerebral blood flow
CMRO₂	Cerebral metabolic rate of Oxygen
CNS	Central nervous system
CO₂	Carbon dioxide
CPAP	Continuous positive airway pressure
CPP	Cerebral perfusion pressure
CT	Computed tomography
CVP	Central venous pressure
CVS	Cardiovascular system
DPG	2, 3-Diphosphoglycerate
DVT	Deep vein thrombosis
EBV	Estimate of blood volume
ECF	Extracellular fluid
ECG	Electrocardiogram
ETCO₂	End tidal CO ₂
ETT	Endotracheal tube
FEV1	Forced expiratory volume in the first second

Abb.	Full term
FLACC	Face, legs, activity, cry, consolability
FRC	Functional Residual Capacity
FVC	Forced vital capacity
GFR	Glomerular filtration rate
GI	Gastrointestinal
HbF	Fetal hemoglobin
HR	Heart rate
IAP	Intraabdominal pressure
ICF	Intracellular fluid
ICP	Intracranial pressure
IV	Intravenous
LMA	Laryngeal mask airway
LVEF	Left ventricular ejection fraction
MAP	Mean Arterial pressure
MH	Malignant hyperthermia
MRI	Magnetic resonance imaging
MV	Minute ventilation
N₂O	Nitrous oxide
NPO	Nil per os
OR	Operating room
PEEP	Positive end expiratory pressure
PIP	Peak inspiratory pressure
PNP	Pneumoperitoneum
PONV	Post-operative nausea and vomiting
PPIA	Parental presence at induction of anesthesia
P_{tp}	Transpulmonary pressure
PVR	Pulmonary vascular resistance
RAAS	Renin-angiotensin-aldosterone system

Abb.	Full term
RBF	Renal blood flow
RS	Respiratory system
rT	Reverse Trendelenburg
SCDs	Sequential compression devices
SV	Stroke volume
SVR	Systemic vascular resistance
TBW	Total body water
TED	Thromboembolic disease
TEE	Transesophageal echocardiography
TIVA	Total intra venous anesthesia
TLC	Total lung capacity
TR	Trendelenburg
URI	Upper respiratory tract infection
V/Q	Ventilation perfusion
VAE	Venous air embolism
VC	Vital capacity
VR	Venous return

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Introduction



Aim of the Work



Chapter One

Anatomical and Physiological Considerations in Pediatrics



Chapter Two

Anesthetic Considerations for Laparoscopic Surgeries in Pediatrics



Summary



References



Arabic Summary

