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# **Updates in Anesthesia for Pediatric Emergency**

***Essay***

*Submitted for Partial Fulfillment for Master Degree  
in Anesthesia*

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*First and Foremost thanks to **ALLAH**, the most merciful*

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## **List of Abbreviations**

<b>Abb.</b>	<b>Full term</b>
<b>AEDs</b>	Antiepileptic drugs
<b>AFB</b>	Airway foreign body
<b>APRV</b>	Airway pressure release ventilation
<b>ASA</b>	American society of anesthesia
<b>ATN</b>	Acute tubular necrosis
<b>ATP</b>	Adenosine triphosphate
<b>CBF</b>	Cerebral blood flow
<b>CEA</b>	Congenital esophageal atresia
<b>CNS</b>	Central nervous system
<b>CPR</b>	Cardiopulmonary resuscitation
<b>CSE</b>	Convulsive status epilepticus
<b>DPG</b>	Di-phosphoglyceric acid
<b>EA</b>	Esophageal atresia
<b>ECF</b>	Extracellular fluid
<b>EDH</b>	Extradural hemorrhage
<b>EMLA</b>	Eutectic mixture of local anesthetic
<b>EPTs</b>	Early post traumatic seizures
<b>ETT</b>	Endotracheal tube
<b>GABA</b>	Gamma amino butyric acid
<b>GCS</b>	Glasgow coma scale
<b>G-CSF</b>	Granulocyte colony stimulating factor
<b>GFR</b>	Glomerular filtration rate

<b>Abb.</b>	<b>Full term</b>
<b>HbF</b>	Fetal hemoglobin F
<b>I.m</b>	Intramuscular
<b>I.V</b>	Intravenous
<b>ICP</b>	Intra cranial pressure
<b>ID</b>	Internal diameter
<b>IgE</b>	Immunoglobulin E
<b>IgG</b>	Immunoglobulin G
<b>IL</b>	Interleukin
<b>LMA</b>	Laryngeal mask air way
<b>MAC</b>	Minimal alveolar concentration
<b>MDI</b>	Metered disc inhaler
<b>NCSF</b>	Non convulsive status epilepticus
<b>NMADA</b>	N-methyl D-aspartate
<b>NSAIDs</b>	Non-steroidal anti-inflammatory drugs
<b>PACU</b>	Post anesthesia care unit
<b>PAF</b>	Platelets activating factor
<b>PCA</b>	Patient controlled analgesia
<b>PEEP</b>	Positive end expiratory pressure
<b>PTH</b>	Parathyroid hormone
<b>PVR</b>	Pulmonary venous resistance
<b>REM</b>	Rapid eye movement
<b>ROS</b>	Reactive oxygen species
<b>RSE</b>	Refractory status epilepticus

<b>Abb.</b>	<b>Full term</b>
<b>SE</b>	Status epilepticus
<b>SVR</b>	Systemic venous return
<b>T3</b>	Tri-iodothyronine
<b>T4</b>	Thyroxin
<b>TBI</b>	Traumatic brain injury
<b>TBSA</b>	Total body surface area
<b>TEF</b>	Tracheoesophageal fistula
<b>TFBs</b>	Tracheobroncheal foreign bodies
<b>TIVA</b>	Total intravenous anesthesia
<b>TNF</b>	Tumor necrosis factor
<b>TSH</b>	Thyroid stimulating hormone

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# **Introduction**

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# **Anatomical, Physiological and Pharmacological Characteristic Changes in Pediatrics**

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# **Pathophysiology of Common Surgical Pediatrics Emergencies**

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# **Anesthetic Consideration in Pediatric Emergencies**

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# Summary

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# References

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# **Arabic Summary**

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