

Severe bronchial asthma in PICU where we are now

Mohamed Ebraheem Elmesserey

Alexandria Faculty of Medicine, Egypt



Abstract

Severe acute asthma (SAA), also known as status asthmaticus, is a severe or life-threatening asthma exacerbation, which does not respond to conventional treatment with inhaled short acting beta-agonist (SABA) and systemic corticosteroids. SAA has the potential to progress to respiratory failure and can be fatal. SAA requiring admission to the pediatric intensive care unit (PICU) occurs in approximately 5–16% of all asthma hospitalizations. Recent reports demonstrate increasing numbers of children requiring PICU admission in several countries across the world. Most pediatric asthma guidelines offer evidence-based approaches to the management of asthma exacerbations (oxygen, inhaled beta-agonists, and systemic corticosteroids). However, they struggle with an evidence-based approach for SAA beyond these initial steps. There is a broad arsenal of adjunct therapies in case the child is not responding to conventional treatment, but the evidence is often unclear, conflicting or absent in the context of PICU care in literature. Adjunct therapies that are often suggested in children with SAA are intravenous (IV) magnesium sulfate (MgSO₄), IV theophylline, and IV salbutamol. We will discuss the current practice in management of severe bronchial asthma in PICU.



We can summarize the take-home message as follows:

- 1) All formulas generate at least 50% of cases between $+ - 0.50$ D.
- 2) SS OCT optical biometers allow better results with all formulas.
- 3) The best results are obtained with KANE, BARRETT, OLSEN and EVO formulas.
- 4) Many scientific papers on small numbers of patients: they do not offer irrefutable results.

Biography:

Dr. Mohamed is a Pediatric Intensivist at Al Jalila Children's with more than 20 years of experience in both Pediatric intensive care unit and neonatal intensive care unit.

Dr Mohamed graduated from Alexandria Faculty of Medicine, Egypt one of the largest and reputable University hospital in Egypt. He completed a residency programme at Alexandria University Children's Hospital and obtained his master's degree in pediatrics and neonatology. Dr Mohamed also is a membership of royal colleague of pediatric and child health London UK. Dr. Mohamed was working as senior specialist in Kuwait for more than 13 years in both NICU and PICU in one of the major governmental hospital. Dr. Mohamed has an interest in PICU and management of acute bronchial Asthma, ARDS, DKA, status epilepticus and all metabolic emergencies.

[2nd International Conference on Pediatrics and Primary Healthcare Nursing Webinar- December 11, 2020](#)

Abstract Citation:

Mohamed Ebraheem Elmesserey, Severe bronchial asthma in PICU where we are now, Pediatrics & Nursing 2020, 2nd International Conference on Pediatrics and Primary Healthcare Nursing, Webinar, December 11, 2020

<https://pediatrics-nursing.nursingmeetings.com/>