

IAP - IJPP CME - 2024**PEDIATRIC SEPTIC SHOCK -
REVISITING KEY UPDATES*****Lakshmi Prashanth**

Abstract: *Septic shock, a subset of sepsis is characterized by profound circulatory and metabolic abnormalities. The pathophysiology involves complex interactions between the host immune response and pathogens, leading to endothelial dysfunction, vasoplegia, relative hypovolemia and myocardial depression. Management strategies include fluid resuscitation, vasopressor support and early antibiotic therapy. Recent years have seen significant updates in the definition, recognition and management of pediatric septic shock. Current emphasis is on early recognition, fluid-sparing resuscitation strategies, early institution of norepinephrine and individualized care (rather than a “one-glove-fits-all” approach). The Phoenix sepsis score, a novel score that identifies life threatening organ dysfunction, is a promising tool for risk stratification.*

Keywords: *Septic shock, Vasoplegia, Myocardial dysfunction, Fluid resuscitation, Vasoactives, Nor-epinephrine, Phoenix sepsis score.*

Points to Remember

- *Septic shock in children is a complex syndrome involving relative hypovolemia, vasoplegia and myocardial dysfunction.*
- *Early recognition using clinical markers and age-specific vital signs is essential.*
- *The three pillars of hemodynamic support are fluids, vasopressors and inotropes.*
- *Management has shifted from aggressive fluid resuscitation to restrictive, individualized fluid therapy combined with early vasoactive support, primarily norepinephrine.*
- *Resuscitation endpoints include adequate cardiac output, MAP/DBP for organ perfusion and avoidance of congestion.*
- *The Phoenix Sepsis Score offers a practical tool for risk stratification.*

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