

CERTAIN IMMUNE MECHANISMS INVOLVED IN NEONATAL SEPSIS DEVELOPMENT

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Development of neonatal sepsis, especially in preterm neonates, is one of the main factors for high morbidity and mortality in the neonatal period. Preterm neonates, with incompletely matured immune system, have enhanced susceptibility to sepsis development, compared to term infants. Innate immune system activation represents the main protective mechanism, in preterm neonates, against sepsis development. Different components of the innate immune system provide basic protection, as well as they may serve as early biomarkers for neonatal sepsis development. In this review, we analyzed basic mechanisms of innate immune response to pathogen presence and different markers included in the initiation of the inflammatory process. Better understanding the mechanisms involved in sepsis development may provide earlier prediction of sepsis development and results in more potent therapeutic efficiency.

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