

Neoteric physiologic and immunologic methods for assessing early-onset neonatal sepsis

Horns KM; College of Nursing, NBICU, University of Utah, Salt Lake City, USA. Septicemia is a growing problem among low birth weight infants. Early identification and treatment of sepsis in these infants would help to reduce the high mortality and morbidity seen with this disorder. Newer techniques may make earlier diagnosis a reality. In the following review article, early-onset sepsis in the premature infant is described, specifically focusing on the neonatal inflammatory response, neutropenia, and its somewhat inconsistent and delayed role as a marker for sepsis risk factors. Physiological signs, laboratory indicators, skin temperature, peripheral perfusion, and the interaction of macro-environmental factors are also discussed. Newer (neoteric) immunologic and cytokine markers of sepsis are reviewed. Finally, **thermography, a noninvasive bioinstrument measuring vasoactive peripheral perfusion, which has potential for early recognition of neonatal septicemia,** is described.