Introduction

Despite improved neonatal care over the past decades, infections remain common and sometimes life-threatening in neonates admitted to the neonatal intensive care unit (NICU) ***(Stoll et al., 2005)***.

* The diagnosis of infection in a neonate remains challenging Signs and symptoms can be subtle, yet infections can evolve rapidly to sepsis with a potentially fatal outcome ***(Fanoroff,2007).***

For many years, a search has been ongoing to find predictors for neonatal sepsis that identify effectively patients who are at risk of infection ***(Ahrens et al., 2004)***.

Low levels of certain proteins of the innate immune system at birth were recently indentified as being associated with neonatal sepsis . Of these proteins, mannose-binding lectin (MBL) ***(Swierzko 2009***)

MBL activates the lectin pathway of the complement system by binding to various micro-organisms. This leads to opsonization and enhanced phagocytosis ***(Dzwonek , 2008)***.

Three structural mutations in exon-1 of the MBL2 gene interfere with the assembly of the protein and cause decreased functional MBL plasma levels ***(Garre et al., 2003)***.

MBL deficiency has been associated with an increased susceptibility to infections ***(Neth, 2004)***.

The detection of MBL deficiency at birth should be based on actual MBL plasma levels rather than on MBL2 genotype ***(Frakking et al., 2006)***.