



**INTRODUCTION
AND
AIM OF THE WORK**

INTRODUCTION AND AIM OF THE WORK

Newborn infants, and in particular preterm infants are especially vulnerable to infections due to an immaturity of their host defense systems. Their impaired immunological competence is partly due to an opsonization defect and a functional immaturity of their white blood cells. Consequently, sepsis remains a major cause of morbidity and mortality in the neonatal period (*Watkinson, 1999*).

The incidence of neonatal infections varies between 1 and 8 cases per 1000 live births (*Guerina, 1998*). As many as 2% of fetuses are infected in utero, and up to 10% of infants are infected during delivery or the first month of life (*Gotoff, 2000*).

Neutrophils and their secretory products contribute of the pathogenesis of many infectious and non-infectious diseases (*Malech et al., 1997*).

Defensins or human neutrophil peptides are cationic proteins with antimicrobial action against Gram-positive and Gram-negative bacteria, fungi and certain enveloped viruses (*Kogam et al., 1994*).

The purpose of this work is to determine the clinical utility of defensin ELISA in the diagnosis of neonatal septicemia.