# *INTRODUCTION*

It is very important that clinicians have the tools to recognize and diagnose sepsis promptly because early diagnosis and treatment may lead to improvement in both mortality and morbidity***. (Rey et al., 2007).***

Neonatal sepsis may be categorized as early or late onset. Eighty-five percent of newborns with early-onset infection present within 24 hours, 5% present at 24-48 hours, and a smaller percentage of patients present within 48-72 hours. Onset is most rapid in premature neonates***. (Klinger et al., 2009).***

A better understanding of the neonatal inflammatory response to sepsis and identification of sensitive and specific markers of inflammation or rapid microbe-specific diagnostic tests would assist in the early detection of neonatal sepsis**. (Arnon S and Litmanovitz I 2008 ).**

Several markers are now available for routine diagnosis in the clinical laboratory. They include the cytokines interleukins and procalcitonin ***(Herzum et al., 2008).*** One of these markers is human neutrophil lipocalin. It is released from secondary granules of neutrophil granulocytes and is regarded as a specific marker of neutrophil activity***. (Bjo¨rkqvist et al., 2004).***

Plasma levels of human neutrophil lipocalin rise in inflammatory or infective condition. It mediates an immune response to bacterial infection by sequestering iron***. (Flo et al., 2004).***

# *Aim of the work*

To evaluate human neutrophil lipocalin (HNL) as a marker of neonatal infection and to show its sensitivity to be used as a marker for neonatal sepsis.