INTRODUCTION

Bacterial infection continues to be the major cause of morbidity and mortality in the newborn. Because the prognosis for sepsis largely depends on early identification and treatment, these newborns are subjected to extensive diagnostic evaluation and empirical systemic antibiotic treatment, pending laboratory results. The definitive diagnosis of sepsis is made by a positive blood culture, which requires a minimum of 48-72 hours, yields a positive result in only 20-70% of cases, and may not always be available in peripheral health centers ***(Manucha et al., 2002)***.

The most important neonatal factor predisposing to infection is prematurely or low birth weight preterm infants have a 3 to 10 fold higher incidence of infection than full-term normal birth weight infants. Possible explanations include:

1. Maternal genital tract infection is considered to be important caused of preterm labor, with an increased risk of vertical transmission to the new born.
2. The frequency of intra-amniotic infection is inversely related to gestational age.
3. Premature infants have documented immune dysfunction.
4. Premature infants often require prolonged intravenous access, endotracheal intubations, or other invasive procedures that provide

a portal of entry or impair barrier and clearance mechanisms ***(Barbara and Stoli, 2008)***.

The principal pathogens involved in neonatal sepsis have tended to change with time. Primary sepsis must be contrasted with nosocomial sepsis. The agents associated with primary sepsis are usually the vaginal flora.

Most centers report group B streptococci (GNS) as the most common, followed by Gram-negative enteric organisms, especially Escherichia coli. Other pathogens include Listeria monocytogenes, Staphylococcus, other streptococci (including the enterococci) anaerobes, and haemophilus influenzae.

In addition, many unusual organisms are documented in primary neonatal sepsis, especially in premature infants. The flora causing nosocomial sepsis vary in each nursery. Staphylococci (especially Staphylococcus epidermidis) gram-negative rods (including Pseudomonas, Klebsiella, Serratia, and Proteus) and fungal organisms predominate ***(Garcia-Prats, 2000)***.

Serum lipids/lipoproteins were assayed to evaluate the diagnostic values of serum lipids/lipoproteins in neonatal sepsis. Apo-A and Apo-B lipoproteins appeared to be a useful marker for detection of neonatal sepsis ***(Yildiz et al., 2009)***.

AIM OF THE WORK:

The aim of this work is to determine role of Apo-A and Apo-B lipoproteins levels in diagnosis of neonatal sepsis.