INTRODUCTION
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Neonatal sepsis remains a major cause of neonatal morbidity and mortality. The incidence of neonatal sepsis varies from 1 to 8/1000 live births in developed countries with considerable variability over time and geographic location *(Gotoff, 1992)*.

Despite the increasing use of newer antibiotics, the mortality rate from neonatal sepsis is still between 20% and 75% *(Cario et al, 1992)*. In Egypt, bacterial infection is responsible for 3-15% of still births and accounts for 10-20% of infant mortality *(El-Diwany et al, 1987)*.

Diagnosis of neonatal sepsis is not an easy task, as most cases present with non-specific symptoms and signs that quite common to other diseases *(McCraken and Freij, 1987)*.

The accurate diagnosis of neonatal septicemia can only be confirmed by the isolation of the causative organism from blood, CSF, urine or other potentially sterile body fluid *(Avery, 1987)*. However, a positive blood culture may not always establish the diagnosis of sepsis, cultures may be contaminated or may result from transient bacteremia secondary to focal infection *(Gotoff, 1992)*.

A number of laboratory tests, alone and in combination, have been evaluated for their utility in providing a rapid indicator of neonatal sepsis.These include the erythrocyte sedimentation rate, C-reactive protein, haptoglobin, fibrinogin, IgM, nitroblue tetrazolium dye, and leukocyte alkaline phosphatase. In general, they are not helpful

(Gotoff, 1992). There is no single laboratory test that has been found to have acceptable specificity and sensitivity for predicting infection *(Guerina, 1991)*.

Acute phase reactants are proteins that typically increase in the acute phase of the inflammatory response. In neonates, the primary reason for intiating an inflammatory response is systemic infection *(Sann et al, 1984)*. Acute phase reactants as CRP, AGP are a very early and sensitive response to most forms of microbial infection *(Pepys, 1981)*.

The complement cascade is activated directly by bacteria and antigen-antibody complexes, and the degree of complement activation could, therefore, provide early and specific evidence of bacterial infection *(Peakman et al, 1992)*.

The aim of this work

is to evaluate the significance of some acute phase reactants as erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), and α_1-acid glycoprotein (AGP), in addition to the third component of the complement system (C3) in early diagnosis of neonatal septicemia with a better chance for proper management.