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Infection is a frequent and important cause of morbidity and mortality in the neonatal period. As many as 2% of foetuses are infected during delivery or the first month of life. Various workers have reported the incidence of sepsis due to group 'B' streptococci to be 2 per thousand live births with a mortality of one per thousand live births.

The term "Sepsis Neonatorum" refers to bacterial infection of infants during the first month of life. The primary site of invasion is most often the bloodstream, with spread to meninges in 25 to 30 percent of cases (Siegel, 1981).

Systemic bacterial disease occurs in one to ten cases per thousand live births, depending on such factors as the rate of prematurity, predisposing maternal conditions, and extent of life-support procedure required postnatally. Badal et al (1977) reported that maternal urinary tract infection, use of internal monitoring devices and prolonged rupture of membrane are well described risk factors in neonatal septicemia.

Freedman et al (1981) reported that the incidence of neonatal septicemia has changed little in the past
50 years, affecting one to five infants per thousand live births; however, the mortality rate for early onset bacterial infections has declined by nearly 60 percent since 1930. LaGamma et al (1981) reported that the infection in the very low birth weight infant has become one of the key determinants of increased mortality after the first 5 days of life. Vesikari et al (1985) reported a mortality rate of 23% from Finland.

Siegel et al (1981) reported that although the incidence of neonatal bacterial diseases has remained constant during the past 50 years, the responsible pathogens have varied considerably, for unknown reasons. In the 1970s, Group B streptococcus emerged as the predominant pathogen in most North American nurseries. Approximately 60 percent of all cases of neonatal sepsis and meningitis are now attributed to this organism and E. coli. In contrast, the Group B streptococcus is an unusual pathogen in other areas of the world. For example, Listeria monocytogenes predominates in Spain and gram-negative enteric bacilli, especially salmonella species are the most frequently implicated organisms in Latin America. Other pathogens commonly isolated from blood or cerebrospinal fluid are staph. aureus, klebsiella, Group B streptococci and Pseudomonas. Chow et al (1974) also reported some anaerobes recovered from blood cultures of as many as 20% of infants, anaerobic bacteremia is usually self limited and is rarely life threatening.
Many laboratory tests assist in the diagnosis of neonatal infections. Definitive diagnosis of a specific infection usually require recovery of an etiological agent from the body fluid or tissues. In neonatal sepsis, Leukopenia, absolute neutropenia, elevated band form/total neutrophil ratio, toxic granulation, mini ESR and several acute phase reactants of bacterial products in body fluids by using specific antibodies have been employed.

Bepys et al (1981) studied that C-reactive protein (an acute phase reactant) is a plasma protein found in very low concentration in the sera of healthy neonate. It has been noted that its level rises regularly in all inflammatory processes. In neonate, this could invariably mean an infection. Increased CRP production is a very early and sensitive response to most forms of microbial infections. They also described that two factors which trigger increased CRP synthesis are interleukin-1 and prostaglandins.

CRP determination in blood of bacteremic and in the CSF of meningitis neonates has revealed a high sensitivity 66-97% (Philips et al, 1983). CRP can be estimated by various methods i.e. either by single radial immunodiffusion technique or by a more rapid semi-quantitative latex agglutination technique, the
latter providing rapid and accurate results in about 15 minutes.

So in the light of above observations, the present study was undertaken to assess the value of CRP in cases of neonatal infections.