

Soluble adhesion molecules

Objective: The present study was designed to determine the level of soluble adhesion molecules(ICAM-1) and C-reactive protein in neonatal sepsis .**Methods:** The study was carried on 30 newborns who had criteria of sepsis (15fullterm and 15 preterm) in addition to 20 healthy neonates as control admitted to the newborn nursery and neonatal ICU In El-Minia university hospital. All patients were subjected to thorough history taking careful clinical examination with particular attention to manifestations of neonatal sepsis (fever or hypothermia ,not doing well ,cyanosis,grunting,irregular respiration, intercostals retraction, hypotonia, hypertonia, tremors, seizures, poor feeding, vomiting, hepatomegaly, purpura, sclerema, jaundice, spleenomegaly, bleeding and pallor) and laboratory investigations which included urine analyses, stool analyses, complete blood picture, blood culture , CRP and Serum ICAM -1 assay by using immunoenzymatic assay .**Results:** There is a significance increase in the level of ICAM -1 in sepsis group than control one (35.95 ± 1.22) with p value 0.001, there is no effect from the prematurity on the level of ICAM -1.C reactive protein (CRP) is an acute phase protein produced by the liver ,plasma concentration is normally under 10 mg . In our study, we found that CRP elevated in septic neonatal group in compared with control group (102.4 ± 60.76) . **conclusion:** assessment of ICAM-1 may be used as diagnostic tools with a high sensitivity and a moderate specificity in neonates suspected of infection. Also CRP concentrations can be used as diagnostic parameter especially in early periods of neonatal infections.

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