THE USEFULNES OF CRP AND I/T-RATIO IN NEONATAL SEPSIS

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GOAL: The goal of the study is to present specificity, sensitivity, positive predictive accuracy (P.P.A), negative predictive accuracy (N.P.A) of the C-reactive protein (CRP) and immature/total neutrophiles ratio (I/T-ratio) as markers for an early detection of neonatal sepsis. MATERIAL AND METODS: The study had 64 newborns with a proven sepsis, and control group of 32 healthy newborns, A CRP has been taken on admission and 24 h after; I/T-ratio is determinate on admission. The specificity, sensitivity, P.P.A. and N.P.A. are determinate according Feinstein. RESULTS: Newborns with sepsis the CRP sensitivity has been 58% on admission and 24 h later 69%. The specificity of the test has been 81%. P.P.A to newborns with a sepsis has been 86% on admission and after 24h. N.P.A. has been 49% on admission and 55% after 24 h which has shown that almost half of the examinees who have had negative results have been really healthy, i.e. the percentage of the ill, who have negative result from this test, is high. The I/T-ratio on admission has had a sensitivity of 41%, specificity of 72%, P.P.A-74.3% and N.P.A.-38%. DISCUSSION AND CONCLUSSION: In this study CRP as a test for an early detection of the infection raises in the first 24 h. The CRP and I/T-ratio has not shown a sufficient sensitivity, specificity and P.P.A. and N.P.A.. Because of that a CRP and I/T - ratio cannot be used separately as a safe marker for detection of sepsis but mutually fulfill each other.