

COMPARATIVE STUDY OF SERUM PROCALCITONIN (PCT) AND C-REACTIVE PROTEIN (CRP) LEVELS IN NEONATAL SEPSIS

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ABSTRACT

Objectives

To assess the Procalcitonin levels in neonatal sepsis and to compare the procalcitonin with CRP in neonatal sepsis

Methods

This cross sectional study was conducted on 50 neonates who were admitted in NICU, clinical features of neo-natal sepsis with maternal risk factors were recorded at greater accuracy. Laboratory factors inclusion with Blood culture, C - reactive protein, Procalcitonin and other investigations for sepsis were performed on subjective basis.

Results

PCT levels was raised in significantly ($p<0.01$) higher number of study cases (80.0%) as compared to CRP which was positive in 58%. The sensitivity, specificity and positive predictive value (PPV) of PCT for detecting sepsis was 93.00%, 50.00%, 78.26 % respectively as compared to CRP ($p<0.01$) with fewer or lesser sensitivity, specificity, PPV as 50.00%, 33.33% and 31.00% respectively ($p<0.01$) . The CRP positive and PCT positives were 65% significantly associated ($p<0.01$) with risk factors .Total 90% of Culture positive neonates were showed to be increased level of PCT. The PCT was a significantly better ($p<0.01$) in early diagnostic marker for intitutive event of sepsis.

Conclusions

PCT is the better indicator of sepsis , could be able to yield better results and reliable marker than CRP in the early diagnosis of neonatal sepsis .

KEYWORDS : Neonatal Sepsis, CRP, Procalcitonin

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