ABSTRACT

Objective – This study was done to compare haematological indices in cord and peripheral blood to predict early onset neonatal sepsis.

Study design – TC, ANC, I/T Ratio, platelet count and Micro ESR were taken in cord and peripheral blood of 142 newborn at risk of early onset neonatal sepsis. These newborns were followed for 3 days to monitor for clinical sepsis.

Results – Both cord and peripheral blood Micro ESR have good positive predictivity in diagnosing clinical sepsis (p value < 0.001). Cord and peripheral blood platelet count have statistically significant correlation (p value < 0.001) but both have poor predictivity in diagnosing early onset sepsis. TC, ANC and I/T Ratio has poor predictivity in diagnosing EOS.

Conclusion - In the present study it was concluded that cord blood micro ESR can be used in sepsis screening to predict the neonates at risk for developing early onset sepsis instead of peripheral blood with a good positive predictive value (p value < 0.001). Cord blood platelet count has good correlation with peripheral blood platelet count (p value < 0.001) but has poor predictivity in diagnosing early onset sepsis. No statistically significant correlation was found between cord blood and peripheral blood Total count, ANC and I/T Ratio. Both cord and peripheral blood Total count, ANC and I/T Ratio has poor predictive value in diagnosing early onset sepsis.