

Rapid Diagnosis of Bacteraemia in Hospitalized Infants and Children in Chhattisgarh

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Abstract

Bacteraemia is frequently seen with serious complication and the problem is more severe in children as it is associated with high morbidity and mortality. Most of the time, it is difficult to diagnose due to presence of non specific clinical features with no noticeable focus of infection. Hence the present study was carried out to identify the rapid diagnostic methods. **Materials and Methods** : Clinically suspected 330 cases of bacteraemia in neonates, infants and children admitted as inpatients at CM Medical College and Hospital, Durg and 25 healthy children as control were included in the present study. The cases were investigated by blood culture and 5 rapid tests Viz total leucocyte count (TLC), immature to total neutrophil (I:T) ratio, C – reactive protein (CRP), ESR and Grams smears of Buffy coat for organisms. **Results**: Blood cultures were positive in 141 (42.7%) cases including 55.3% gram negative and 44.6% of gram positive. The most common isolates were Staphylococcus epidermides (25.5%) and Staphylococcus aureus (17.0%) with overall staphylococcal prevalence of 42.5%. CRP yielded maximum sensitivity of 80.5%, Specificity of 77.7% and positive predictive accuracy of 73.0%. **Conclusion**: Blood cultures and a battery of rapid tests could be carried out depending upon the amount of blood drawn from children of different age groups. And if blood drawn is around 1ml only CRP test could be preferred since it is a sensitive indicator of bacteraemia.