

Hubungan Kadar C-Reactive Protein dengan Laju Endap Darah pada Pasien Widal Positif

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ABSTRAK

Gejala klinis demam tifoid dan demam paratifoid sangat bervariasi, sedangkan *gold standard* pemeriksaan laboratoriumnya adalah kultur bakteri dengan proses pemeriksaannya mencapai 3 hari, sehingga dibutuhkan pemeriksaan tambahan lain untuk menunjang diagnosis laboratorium demam tifoid dan demam paratifoid. Pemeriksaan yang mungkin dilakukan pada dugaan infeksi diantaranya pemeriksaan CRP dan LED. CRP adalah protein fase akut yang diperiksa untuk memantau secara *non-spesifik* ketika terjadi infeksi, sedangkan LED adalah pemeriksaan peradangan *non-spesifik*, secara klinis berguna untuk penapisan penyakit inflamasi. Tujuan penelitian ini untuk mengetahui hubungan kadar CRP dengan LED pada pasien Widal positif. Jenis penelitian ini adalah penelitian analitik korelatif. Sampel diambil secara *purposive sampling* sebanyak 30 sampel yang memenuhi kriteria inklusi di RS Roemani Muhammadiyah Semarang, kemudian sampel diperiksa kadar CRP dengan metode lateks imunoaglutinasi semikuantitatif dan LED dengan metode westergren. Hasil pemeriksaan menunjukkan rata-rata kadar CRP 18,40 mg/L, sedangkan rata-rata nilai LED 15,20 mm/jam. Analisis statistik digunakan uji korelasi pearson.. Hasil menunjukkan bahwa adanya hubungan sangat kuat dan signifikan antara kadar CRP dengan LED pada pasien Widal Positif dengan *p-value* $p < 0,05$ dan $r = 0,886$.

Kata kunci : pasien Widal positif, kadar CRP, nilai LED

The Correlation Between Concentration of C-Reactive Protein and Estimation Sedimentation Rate at Patients with Positive Widal Test Result

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ABSTRACT

Clinical manifestation of typhoid or paratyphoid fever are very varied, whereas gold standard of laboratory examination was bacterial culture that the process maintain within 3 days, so it was needed additional examination that could be supported early diagnosis of the disease. The possible examination of infection suspected were CRP and LED assay. CRP is an acute phase protein which examined for non-specific monitoring during infection, and LED is a non-specific inflammatory examination which was clinically useful for screening inflammatory diseases. The aim of this study was to determine correlation between concentration of CRP and LED at patients with positive Widal test result. The study was analytic-correlative design through a cross sectional approach. 30 patients in RS Roemani Muhammadiyah Semarang were choosen using purposive sampling method. The CRP test used semi quantitative latex immunoagglutination method and Westergren method for LED. The result showed that mean of CRP was 18,40 mg/L and mean of LED was 15,20 mm/jam. Variables were analyzed using pearson correlation. The result showed the correlation coefficient between CRP and LED was 0,886 and *p-value* 0,000 ($p \leq 0,05$). Thus, it can be concluded that there is strong and significant correlation between concentration of CRP and LED at patients with positive Widal test result.

Keyword: positive Widal test result, concentration of CRP, LED