

POLITEKNIK KESEHATAN KEMENKES TANJUNGPINANG
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**Hubungan Kadar Procalcitonin Terhadap Jumlah Limfosit Pada Pasien
Pneumonia Di Rsud Dr. H. Abdul Moeloek.**

xvi + 36 halaman + 4 tabel + 1 gambar + 7 lampiran

ABSTRAK

Pneumonia merupakan infeksi saluran pernapasan yang dapat menyebabkan respons inflamasi sistemik. Diagnosis dan evaluasi tingkat keparahan pneumonia memerlukan pemeriksaan penunjang yang akurat. Procalcitonin (PCT) adalah biomarker yang meningkat pada infeksi bakteri dan digunakan untuk menilai tingkat keparahan infeksi serta menentukan kebutuhan terapi antibiotik. Sementara itu, jumlah limfosit mencerminkan respons imun tubuh terhadap infeksi, di mana pada pneumonia berat sering ditemukan limfopenia akibat migrasi limfosit ke jaringan paru yang terinfeksi. Penelitian ini bertujuan untuk mengetahui hubungan antara kadar Procalcitonin terhadap jumlah limfosit pada pasien pneumonia. Penelitian ini menggunakan desain cross-sectional dengan teknik total sampling. Sampel terdiri dari 29 pasien pneumonia di RSUD Dr. H. Abdul Moeloek pada Juni 2025. Kadar PCT diperiksa menggunakan metode ELISA dan data jumlah limfosit diperoleh dari rekam medis. Analisis data dilakukan menggunakan uji korelasi Spearman. Hasil menunjukkan kadar PCT rata-rata sebesar 0,2303 ng/dL dan jumlah limfosit rata-rata sebesar 29,72%. Uji Spearman menunjukkan nilai $p = 0,361$ ($p > 0,05$) dan $r = -0,176$, yang berarti tidak terdapat hubungan yang signifikan antara kadar Procalcitonin dan jumlah limfosit. Simpulkan bahwa tidak ditemukan hubungan antara kadar Procalcitonin dengan jumlah limfosit pada pasien pneumonia.

Kata kunci: Inflamasi, Limfosit, Pneumonia, Procalcitonin

Daftar Bacaan: 47 (1992-2024)

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***Relationship Between Procalcitonin Levels And Lymphocyte Counts In
Pneumonia Patients At Dr. H. Abdul Moeloek Regional Hospital.***

xvi + 36 pages + 4 tables + 1 figure + 7 attachments

ABSTRACT

Pneumonia is a respiratory tract infection that can trigger a systemic inflammatory response. The diagnosis and evaluation of pneumonia severity require accurate supporting examinations. Procalcitonin (PCT) is a biomarker that increases during bacterial infections and is used to assess infection severity and guide antibiotic therapy. Meanwhile, lymphocyte count reflects the body's immune response to infection, where severe pneumonia often presents with lymphopenia due to the migration of lymphocytes into the infected lung tissue. This study aimed to determine the relationship between procalcitonin levels and lymphocyte counts in patients with pneumonia. A cross-sectional design was used with a total sampling technique. The sample consisted of 29 pneumonia patients at Dr. H. Abdul Moeloek Regional Hospital in June 2025. PCT levels were measured using the ELISA method, and lymphocyte data were obtained from medical records. Data were analyzed using the Spearman correlation test. The results showed an average PCT level of 0.2303 ng/dL and an average lymphocyte percentage of 29.72%. The Spearman test showed a p-value of 0.361 ($p > 0.05$) and an r-value of -0.176, indicating no significant relationship between procalcitonin levels and lymphocyte counts. It is concluded that there is no significant correlation between procalcitonin levels and lymphocyte counts in pneumonia patients.

Keywords: Inflammation, Lymphocytes Pneumonia, Procalcitonin,

References: 47 (1992–2024)