

ABSTRACT

THE REALTIONSHIP OF ANTI-TUBERCULOSIS PULMONARY TREATMENT PHASE WITH NEUTROFIL LYMPHOCYTE RATIO (NLR) AND MONOCYTE LYMPHOCYTE RATIO (MLR) IN PATIENTS WITH TB PLEURAL EFFUSION AT H. ABDUL MOELOEK HOSPITAL, LAMPUNG PROVINCE

By

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Background: Indonesia ranked as the second country with the highest population of tuberculosis cases in the world. Tuberculous pleurisy is the most common form of extrapulmonary infection. Quick and accurate diagnosis and treatment are important. However, BTA staining is sometimes negative, *Mycobacterium tuberculosis* culture requires a long process and time, and ELISA, PCR, interferon also ADA examinations are relatively fast and expensive. The study aimed to determine the relationship between the anti-tuberculosis treatment phase and the neutrophil-lymphocyte ratio and monocyte-lymphocyte ratio in pleural effusion patients.

Method: This study used cross-sectional analytical quantitative research. Conducted in 01 – 14 December 2023 at Abdul Moeloek Regional Hospital, Lampung, using a total sampling technique, 31 samples were found that met the criteria from medical records and carried out Fisher-Exact test analysis.

Results: The results of the study showed that 19 (61.3%) patients who had not received OAT therapy and 12 (38,7%) intensive phase patients were diagnosed with tuberculous pleural effusion with a mean RNL and RML were 8.79 ($p= 0.008$) and 0.81 ($p=0.22$).

Conclusion: There is a significant relationship between the phase of pulmonary anti-tuberculosis treatment and the neutrophil-lymphocyte ratio (RNL) and monocyte lymphocyte ratio (RML) in TB pleural effusion patients at RSUD. H. Abdul Moeloek Lampung Province.

Keywords: Pleural Effusion, RNL, RML, Tuberculosis Treatment Phase

ABSTRAK

HUBUNGAN FASE PENGOBATAN ANTI TUBERKULOSIS PARU DENGAN RASIO NEUTROFIL LIMFOSIT (RNL) DAN RASIO MONOSIT LIMFOSIT (RML) PADA PASIEN EFUSI PLEURA TB DI RSUD H. ABDUL MOELOEK PROVINSI LAMPUNG

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Latar belakang: Indonesia menjadi negara peringkat kedua TB. Pleuritis tuberkulosis bentuk infeksi ekstra paru paling umum. Diagnosis dan pengobatan cepat tepat penting, akan tetapi pewarnaan BTA terkadang negatif, kultur *Mycobacterium tuberculosis* membutuhkan proses dan waktu lama, pemeriksaan ELISA, PCR, interferon, dan ADA tergolong cepat serta mahal. Tujuan penelitian mengetahui hubungan fase pengobatan anti tuberkulosis dengan rasio neutrofil limfosit dan rasio monosit limfosit pada pasien efusi pleura.

Metode: Jenis penelitian kuantitatif analitik *cross sectional*. Dilakukan bulan 01 - 14 Desember 2023 di RSUD Abdul Moeloek Lampung dengan teknik *total sampling* ditemukan 31 sampel memenuhi kriteria dari rekam medis dilakukan analisis uji *fisher-exact*.

Hasil: Hasil penelitian menunjukkan pasien belum terapi OAT 19 (61.3%) dan fase intensif 12 (38.7%) terdiagnosis efusi pleura tuberkulosis dengan rerata RNL dan RML sebesar 8.79 ($p=0.008$) dan 0.81 ($p=0.22$).

Kesimpulan: Terdapat hubungan signifikan fase pengobatan anti tuberkulosis paru dengan rasio neutrofil limfosit (RNL) dan rasio monosit limfosit (RML) pada pasien efusi pleura TB di RSUD. H. Abdul Moeloek Provinsi Lampung.

Kata Kunci: Efusi Pleura, RNL, RML, Fase Pengobatan Tuberkulosis