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**HUBUNGAN NILAI *Cycle threshold (Ct)* PEMERIKSAAN TES CEPAT MOLEKULER (TCM) DENGAN HITUNG JENIS LEUKOSIT PADA PENDERITA TB PARU KABUPATEN MESUJI**

xiv + 32 halaman, 4 tabel, 6 gambar, 16 lampiran

**ABSTRAK**

Tuberkulosis (TB) disebabkan oleh *Mycobacterium tuberculosis*. Penegakan diagnosa TB dengan menggunakan metode Tes Cepat Molekuler (TCM). Reaksi imun adaptif mengakibatkan fagositosis, sehingga terjadi peningkatan leukosit. Tujuan penelitian ini untuk mengetahui hubungan nilai *Cycle threshold (Ct)* dengan hitung jenis leukosit. Jenis penelitian adalah analitik dengan desain *cross sectional*. Penelitian dilakukan di RSUD Ragab Begawe Caram, Puskesmas Margojadi, Sidomulyo dan Panggung Jaya yang ada di Kabupaten Mesuji sejak bulan Februari sampai Mei 2024. Penelitian dilakukan dengan melakukan pencatatan nilai *Ct* pada pemeriksaan Tes Cepat Molekuler (TCM) dan pemeriksaan mikroskopis Slide Apus Darah (SAD) untuk menghitung jenis leukosit. Analisis data dilakukan secara univariat dan bivariat dengan menggunakan uji korelasi *Spearman*. Terdapat 32 sampel yaitu 21 orang (65,6%) laki-laki dan 11 orang (34,4%) perempuan. Rentang usia terbanyak pada usia 15-64 tahun. Nilai rata-rata *Ct* sebesar 20,7. Kategori terbanyak adalah medium sebanyak 18 sampel (56,25%). Nilai rata-rata untuk tiap jenis leukosit Basofil (0%), Eosinofil (1,3%), Neutrofil Staff (4,2%), Neutrofil Segmen (71,2%), Limfosit (18,1%), dan Monosit (5,0%). Hasil uji statistik untuk masing-masing variabel nilai *p value* nya lebih besar dari  $p > 0,05$ . Simpulan penelitian menunjukkan tidak ada hubungan antara nilai *Cycle threshold (Ct)* dengan hitung jenis leukosit pada penderita TB paru di Kabupaten Mesuji.

Kata Kunci : TCM, hitung jenis leukosit, tuberkulosis  
Daftar Bacaan : 35 (2010 – 2023)

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***CORRELATION VALUE of Cycle treshold (Ct) MOLECULAR RAPID TEST  
(TCM) EXAMINATION WITH LEUKOCYTE TYPE CALCULATION IN  
PULMONARY TB PATIENTS MESUJI REGENCY***

*xiv + 32 pages, 4 tables, 6 pictures, 16 appendices*

**ABSTRACT**

*Tuberculosis (TB) is caused by Mycobacterium tuberculosis. Enforcement of TB diagnosis using the Molecular Rapid Test (TCM) method. Adaptive immune reactions result in phagocytosis, resulting in an increase in leukocytes. The purpose of this study is to determine the relationship between the value of Cycle treshold (Ct) and the calculation of leukocyte type. The type of research is analytics with a cross sectional design. The research was conducted at Ragab Begawe Caram Hospital, Margojadi, Sidomulyo and Panggung Jaya Health Centers in Mesuji Regency from February to May 2024. The study was carried out by recording Ct values on the Molecular Rapid Test (TCM) examination and the Blood Apus Slide (SAD) examination to calculate the type of leukocyte. Data analysis was carried out univariate and bivariate using the Spearman correlation test. There were 32 samples, namely 21 people (65.6%) men and 11 people (34.4%) women. The most age range is 15-64 years old. The average value of Ct is 20.7. The most category is medium with 18 samples (56.25%). The average values for each type of leukocyte were Basophil (0%), Eosinophil (1.3%), Neutrophil Staff (4.2%), Segment Neutrophil (71.2%), Lymphocyte (18.1%), and Monocyte (5.0%). The results of the statistical test for each variable the p value is greater than  $p > 0.05$ . The conclusion of the study showed that there was no relationship between the value of Cycle treshold (Ct) and the calculation of leukocyte type in patients with pulmonary TB in Mesuji Regency.*

*Keywords : TCM, count leukocyte type, tuberculosis*

*Reading List : 35 (2010 – 2023)*