

KORELASI ANTARA TIPE ENDOMETRIOSIS DENGAN NILAI *NEUTROPHIL-TO-LYMPHOCYTE RATIO* (NLR) DI RSUD PROF. DR. MARGONO SOEKARJO

ABSTRAK

Latar belakang: Endometriosis merupakan penyakit inflamasi kronis pada wanita usia reproduktif yang dapat menimbulkan nyeri panggul, gangguan fertilitas, serta penurunan kualitas hidup. Berdasarkan lokasi anatomi, endometriosis diklasifikasikan menjadi kista ovarium (ovarian endometrioma), *superficial peritoneal endometriosis*, dan *deep infiltrating endometriosis*. Proses inflamasi memegang peranan penting dalam patogenesis endometriosis, sehingga biomarker inflamasi sistemik seperti *Neutrophil-to-Lymphocyte Ratio* (NLR) berpotensi mencerminkan tingkat aktivitas inflamasi penyakit. Namun, hubungan antara tipe endometriosis dan nilai NLR masih belum banyak diteliti, khususnya pada populasi Indonesia. **Tujuan:** Mengetahui korelasi antara tipe endometriosis dan nilai *Neutrophil-to-Lymphocyte Ratio* (NLR) pada pasien endometriosis di RSUD Prof. Dr. Margono Soekarjo. **Metode:** Penelitian ini merupakan penelitian observasional analitik dengan desain *cross-sectional* menggunakan data sekunder rekam medis pasien endometriosis di RSUD Prof. Dr. Margono Soekarjo. Data yang dikumpulkan meliputi tipe endometriosis (kista ovarium, *superficial peritoneal endometriosis*, dan *deep infiltrating endometriosis*) serta nilai NLR. Analisis statistik dilakukan untuk menilai hubungan antara tipe endometriosis dan nilai NLR menggunakan uji korelasi *Chi-Square*. **Hasil:** Sebanyak 54 subjek penelitian dianalisis. Nilai NLR tertinggi terdapat pada tipe kista ovarium ($3,65 \pm 0,30$), diikuti *superficial peritoneal endometriosis* ($2,83 \pm 0,59$), dan terendah pada *deep infiltrating endometriosis* ($2,19 \pm 0,28$). Hasil uji *Chi-Square* menunjukkan bahwa terdapat hubungan yang bermakna secara statistik antara tipe endometriosis dan kategori nilai NLR ($p = 0,017$). **Kesimpulan:** Terdapat korelasi yang bermakna antara tipe endometriosis dan nilai *Neutrophil-to-Lymphocyte Ratio* (NLR). NLR berpotensi digunakan sebagai parameter hematologi sederhana untuk mendukung penilaian inflamasi sistemik pada pasien tipe endometriosis.

Kata kunci: endometriosis, tipe endometriosis, *neutrophil-to-lymphocyte ratio* (NLR), inflamasi, biomarker hematologi.

**CORRELATION BETWEEN ENDOMETRIOSIS TYPES AND
NEUTROPHIL-TO-LYMPHOCYTE RATIO (NLR) AT RSUD PROF. DR.
MARGONO SOEKARJO**

ABSTRACT

Background: Endometriosis is a chronic inflammatory disease in women of reproductive age that can cause pelvic pain, fertility disorders, and decreased quality of life. Based on anatomical location, endometriosis is classified into ovarian cysts (ovarian endometrioma), superficial peritoneal endometriosis, and deep infiltrating endometriosis. Inflammatory processes play an important role in the pathogenesis of endometriosis; therefore, inflammatory biomarkers such as the Neutrophil-to-Lymphocyte Ratio (NLR) have the potential to reflect the level of inflammatory activity of the disease. However, the relationship between endometriosis types and NLR values has not been widely studied, particularly in the Indonesian population. **Objective:** This study aimed to determine the correlation between endometriosis types and Neutrophil-to-Lymphocyte Ratio (NLR) in patients with endometriosis at RSUD Prof. Dr. Margono Soekarjo. **Methods:** This analytical observational study was conducted using a cross-sectional design with secondary data from medical records of endometriosis patients at RSUD Prof. Dr. Margono Soekarjo. Data included endometriosis types and NLR values. Statistical analysis was performed using the Chi-Square correlation test. **Results:** A total of 54 subjects were analyzed. The highest NLR value was found in ovarian cyst type (3.65 ± 0.30), followed by superficial peritoneal endometriosis (2.83 ± 0.59), and the lowest in deep infiltrating endometriosis (2.19 ± 0.28). The Chi-Square test showed a statistically significant relationship between endometriosis types and NLR categories ($p = 0.017$). **Conclusion:** There is a significant correlation between endometriosis types and Neutrophil-to-Lymphocyte Ratio (NLR). NLR serves as a simple hematological parameter to support the assessment of inflammation in patients with different types of endometriosis.

Keywords: endometriosis, endometriosis types, neutrophil-to-lymphocyte ratio (NLR), inflammation, hematological biomarkers.