

## ABSTRACT

**Background:** Appendicitis is one of the most common acute abdominal conditions.

To help establish a clinical diagnosis, a leukocyte count examination is performed.

**Research Purpose:** to determine the relationship between the number of leukocytes and the incidence of acute appendicitis and perforated appendicitis.

**Research Method:** The type of this research uses a cross-sectional approach, involving 194 samples of acute appendicitis and perforated appendicitis that have undergone leukocyte count examination and appendectomy. Data were analyzed using the Mann-Whitney test, yielding a significance value of 0.000 ( $p<0.05$ ).

**Result:** It was found that 65 patients (67%) with acute appendicitis experienced leukocytosis, whereas in perforated appendicitis, there were 95 patients (97.9%). The majority of patients with acute appendicitis and perforated appendicitis were aged 17-25 years, there are 51 patients in total (26.3%). Furthermore, the majority of patients with acute appendicitis and perforated appendicitis were male, with 104 patients (53.7%).

**Conclusion:** There is a significant relationship between the number of leukocytes and the incidence of acute appendicitis and perforated appendicitis at RSUD Raden Mattaher Jambi from 2018 to 2022.

**Keywords:** Acute Appendicitis, Perforated Appendicitis, Leukocyte Count

## **ABSTRAK**

**Latar belakang:** Appendisitis merupakan satu diantara kejadian akut abdomen yang paling paling sering terjadi. Untuk membantu menegakkan diagnosis klinis maka dilakukan pemeriksaan hitung jumlah leukosit.

**Tujuan:** Mengetahui hubungan antara jumlah leukosit dengan kejadian appendisitis akut dan appendisitis perforasi.

**Metode:** Jenis penelitian ini menggunakan pendekatan *cross sectional*, Dengan melibatkan 194 sampel appendisitis akut dan appendisitis perforasi yang telah melakukan pemeriksaan hitung jumlah leukosit dan melakukan apendektomi. Data dianalisis menggunakan uji *Mann-Whitney* didapatkan nilai signifikansi sebesar 0,000 ( $p<0,05$ ).

**Hasil:** Ditemukan 65 pasien (67%) appendisitis akut mengalami leukositosis, sedangkan pada appendisitis perforasi terdapat 95 pasien (97,9%). Sebagian besar pasien appendisitis akut dan appendisitis perforasi berusia 17-25 tahun yaitu 51 pasien (26,3%). Pasien appendisitis akut dan appendisitis perforasi lebih banyak berjenis kelamin laki-laki yaitu sebanyak 104 pasien (53,7%).

**Kesimpulan:** Terdapat hubungan yang signifikan antara jumlah leukosit dengan kejadian appendisitis akut dan appendisitis perforasi di RSUD Raden Mattaher Jambi tahun 2018-2022.

**Kata kunci:** Appendisitis Akut, Appendisitis Perforasi, Jumlah Leukosit