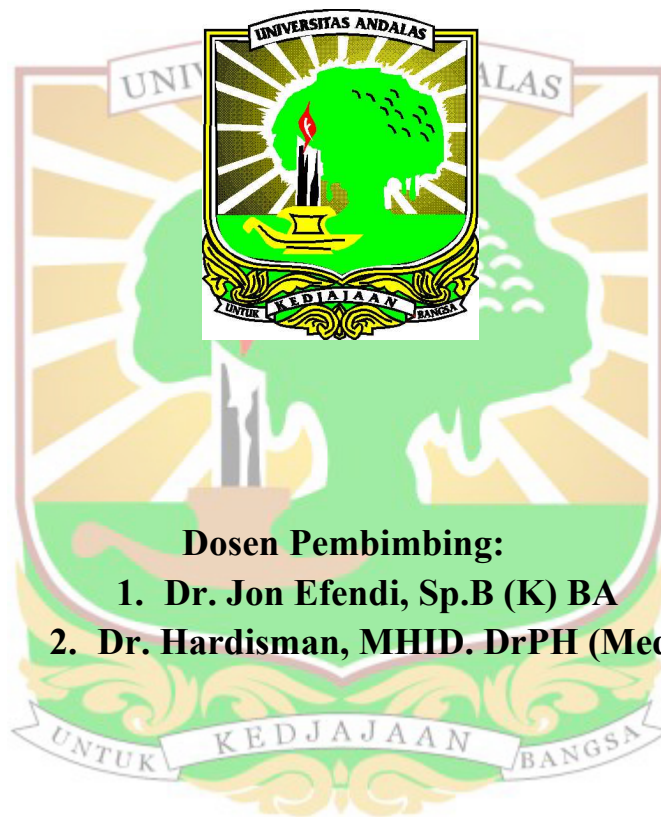# UJI DIAGNOSTIK : KEAKURATAN C – REAKTIF PROTEIN MENDIAGNOSIS APPENDISITIS AKUT PADA ANAK

Oleh
Dr. Firdaus Benny Putra
1150303201

Dosen Pembimbing:
1. **Dr. Jon Efendi, Sp.B (K) BA**
2. **Dr. Hardisman, MHID. DrPH (Med)**

FAKULTAS KEDOKTERAN UNIVERSITAS ANDALAS
RSUP DR M DJAMIL
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UJI DIAGNOSTIK KEAKURATAN C–REAKTIF PROTEIN MENDIAGNOSIS APPENDISITIS AKUT PADA ANAK

Firdaus Benny Putra[1], Jon Efendi[1], Hardisman[2]

ABSTRAK

Latar belakang dan tujuan: Appendisitis akut adalah akut abdomen paling banyak dan paling sering jadi indikasi bedah abdomen emergensi anak, sementara untuk didiagnosis masih sulit. Kesalahan diagnosis meningkatkan *negative appendectomy* dan keterlambatan diagnosis meningkatkan morbiditas dan mortalitas. *CRP* adalah pertanda adanya reaksi inflamasi yang lebih cepat dalam mendeteksi keadaan dari suatu infeksi.

Akurasi CRP penelitian Tzanakis, sensitivitas 73%, Spesifitas 93%, NIlai duga positif 82%, NIlai duga negative 91%, dan beberapa penelitian berikutnya memberikan hasil berbeda. Insidensi appendicitis anak masih tinggi, di Amerika Serikat lebih dari 70.000 anak didiagnosis appendicitis, 1 dari 1000 anak pertahun, data rekam medik RSUP DR. M. DJamil oktober 2016 – desember 2016 didapatkan anak usia 4 tahun sampai 15 tahun dilakukan appendektomi 26 kasus. CRP berperan menegakan diagnosis, sehingga perlu dilakukan validasi.

Metode: Penelitian ini merupakan Uji Diagnostik untuk mengetahui akurasi CRP untuk mendiagnosis appendicitis akut anak, sampel adalah pasien anak usia 4 – 15 tahun yang dicurigai appendicitis akut setelah dilakukan pemeriksaan fisik kemudian dilakukan tindakan operasi. Sampel kemudian dilakukan pemeriksaan Patologi Anatomi sebagai *Gold Standard*.

Hasil: Dari 26 sampel, CRP diatas $\geq$ 1 mg/dl, Sensitifitas 96%, Spesifisitas 100%, Nilai duga Positif 100% dan Nilai Duga Negatif 80%.

Kesimpulan: *C – Reactive Protein* Valid dan akurat dalam menegakan Diagnosis appendicitis akut anak dan dapat dijadikan dasar pembedahan.

Kata kunci: apendisitis akut, Uji diagnostic, CRP, Gold standar

[1]Bagian Bedah FK UNAND/ RSUP Dr M Djamil Padang
[2]Bagian Kesehatan Masyarakat FK UNAND

DIAGNOSTIC TEST OF C-REACTIVE PROTEIN FOR DIAGNOSIS ACUTE APPENDICITIS IN CHILDREN

Firdaus Benny Putra[1], Jon Efendi[1], Hardisman[2]

ABSTRACT

Background and aims: Acute appendicitis is the most common acute abdomen and the most frequent indication of emergency abdominal surgery in childhood, while the diagnosis is remain difficult. Misdiagnosis increase *negative* appendectomy and delayed diagnosis increase morbidity and mortality. CRP is a sign of the inflammatory reaction that is more faster in detecting the state of an infection.

The accuracy of CRP research by Tzanakis, sensitivity 73%, specificity 93%, positive predictive value 82%. Negative predictive value 91% and several subsequent studies show different result. The incidence of appendicitis in children is still high, in the United State over 70.000 children diagnosed as appendicitis, one of 1000 children annually, medical record data DR. M. Djamil Hospital October 2016 – December 2016 obtained 26 cases of appendectomy performed in the age of 4 years to 15 years. CRP plays uphold the diagnosis, so it needs to be validated.

Methods: This study is a diagnostic test to determine the accuracy of CRP for the diagnosis of acute appendicitis in children. The sample is a pediatric patients aged 4 – 15 years who suspected acute appendicitis after a physical examination and the do surgery. The samples were then examined Pathology as Gold Standard.

Result: Of the 26 samples CRP value ≥ 6, sensitivity 96%, specificity 100%, positive predictive value 100% and negative predictive value 80%.

Conclusion: C − Reactive Protein is valid and accurate in establishing the diagnosis of acute appendicitis in children and can be a clinical reason for surgery.

Keywords: *acute appendicitis, Diagnostic Test, C- Reactive Protein, Gold Standard*

[1]Department of Surgery Faculty of Medicine Andalas University/DR.M. Djamil Hospital Padang

[2]Department of Public Health Faculty of Medicine Andalas University