

**PERBANDINGAN INDEKS *FIBROSIS-4* (FIB-4) ANTARA PASIEN
SIROSIS HEPATIS DAN KARSINOMA HEPATOSELULER
DI RSUD PROF. DR. MARGONO SOEKARJO**

ABSTRAK

Latar Belakang : Sirosis hepatitis merupakan penyebab kematian ke-11 di dunia dan karsinoma hepatoseluler (KHS) penyebab kematian ketiga akibat kanker di Asia. Berdasarkan patogenesisnya, inflamasi kronis pada hati yang berurutan berkembang dari fibrosis ke sirosis dan akhirnya memuncak pada KHS. Dapat dipahami bahwa derajat fibrosis hati berperan penting dalam patomekanisme perkembangan sirosis hepatitis menjadi KHS. Saat ini, *gold standard* pemeriksaan sirosis hepatitis dan KHS menggunakan test invasif biopsi hati, sehingga perlu dipertimbangkan pemeriksaan noninvasif untuk membantu penegakan diagnosis. Fibrosis 4 (FIB-4) merupakan metode sederhana, akurat, dan murah untuk memprediksi fibrosis hepar sehingga dapat mengurangi kebutuhan untuk biopsi hati pada pasien. Parameter FIB-4 terdiri dari usia, *Aspartate Aminotransferase* (AST), *Alanine Aminotransferase* (ALT), dan jumlah trombosit.

Tujuan : Membandingkan indeks FIB-4 antara pasien sirosis hepatitis dan karsinoma hepatoseluler di RSUD Prof. Dr. Margono Soekarjo Purwokerto.

Metode : Penelitian analitik observasional dengan desain *cross-sectional* dan teknik *consecutive sampling*. Subjek penelitian berjumlah 17 sampel masing-masing kelompok, merupakan pasien sirosis hepatitis dan karsinoma hepatoseluler primer yang baru terdiagnosis di RSUD Prof. Dr. Margono Soekarjo, Purwokerto pada periode Mei-November 2019. Analisa yang digunakan adalah uji T tidak berpasangan.

Hasil : Uji T tidak berpasangan menunjukkan adanya perbedaan yang bermakna indeks Fibrosis-4 (FIB-4) antara sirosis hepatitis dan KHS ($p = 0,003$).

Kesimpulan : Indeks Fibrosis-4 (FIB-4) berbeda antara pasien sirosis hepatitis dan KHS di RSUD Prof. Dr. Margono Soekarjo Purwokerto.

Kata kunci : *Fibrosis-4*, FIB-4, Karsinoma Hepatoseluler, KHS, Sirosis Hepatis.

COMPARISON OF FIBROSIS-4 (FIB-4) INDEX BETWEEN PATIENTS WITH HEPATIC CIRRHOSIS AND HEPATOCELLULAR CARCINOMA IN PROF. DR. MARGONO SOEKARJO GENERAL HOSPITAL PURWOKERTO

ABSTRACT

Background: Hepatic cirrhosis is the eleventh cause of death in the world and hepatocellular carcinoma (HCC) is the third cause of death due to cancer in Asia. According to its pathogenesis, chronic liver inflammation will develop into fibrosis to cirrhosis and to HCC. To date, the gold standard of hepatic cirrhosis and HCC examination is liver biopsy, thus non-invasive to help diagnosis establishment should be considered. Fibrosis 4 (FIB-4) is a simple, accurate and affordable method to predict hepatic fibrosis which can reduce the need for liver biopsy in patients. FIB-4 parameters consist of age, Aspartate Aminotransferase (AST), Alanine Aminotransferase (ALT), and platelet count.

Objective: Comparing FIB-4 index between hepatic cirrhosis and hepatocellular carcinoma patients in Prof. Dr. Margono Soekarjo General Hospital Purwokerto.

Methods: Observational analytical study with cross-sectional design and consecutive sampling method. The subjects were 17 samples from each group, consisted of patients which newly diagnosed with primary hepatocellular carcinoma and hepatic cirrhosis in Prof. Dr. Margono Soekarjo General Hospital Purwokerto within May-November 2019. The analysis used was independent T-test.

Results: Independent T-test results revealed significant difference of fibrosis-4 (FIB-4) index between hepatic cirrhosis and HCC ($p = 0.003$).

Conclusion: Fibrosis-4 (FIB-4) index was different between patients with hepatic cirrhosis and HCC in Prof. Dr. Margono Soekarjo General Hospital Purwokerto.

Keywords: Fibrosis-4, FIB-4, Hepatocellular Carcinoma, HCC, Hepatic Cirrhosis.