

**ABSTRAK****Hubungan Antara Kadar Serum Hepsidin Dengan Fibrosis Hati  
Berdasarkan *Fibroscan* Pada Pasien Hepatitis C Kronis**  
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**Latar belakang:** Penyakit hati kronis yang disebabkan oleh infeksi virus hepatitis C dapat berkembang menjadi fibrosis hati, sirosis hati hingga karsinoma hepatoselluler. Zat besi yang berlebihan pada infeksi virus hepatitis C kronis merupakan kofaktor yang mendorong perkembangan kerusakan hati dan meningkatkan risiko terjadinya fibrosis hati, sirosis hati, dan karsinoma hepatoselluler. Peningkatan status zat besi pada infeksi hepatitis C dikaitkan dengan penurunan kadar hepsidin, suatu regulator utama homeostatis zat besi. Hubungan antara hepsidin dengan derajat fibrosis hati pada pasien hepatitis C kronis yang belum mendapatkan terapi masih menjadi kontroversi

**Tujuan:** Menganalisis hubungan kadar serum hepsidin dengan fibrosis hati berdasarkan *fibroscan* pada pasien hepatitis C kronis di Poliklinik Gastroentero-Hepatologi.

**Material dan Metode:** Penelitian analitik observasional *cross-sectional*, meliputi 34 pasien hepatitis C yang memenuhi kriteria inklusi dan eksklusi selama bulan Juli – September 2019. Pasien dipilih secara konsekutif dan diperiksa kadar hepsidin serta pemeriksaan *fibroscan* untuk mengukur fibrosis hati. Analisis data menggunakan uji korelasi Spearman dan dianggap bermakna jika  $p < 0,05$ .

**Hasil:** 34 subjek yang diikutsertakan dalam penelitian ini, terdiri dari 12 subjek laki-laki dan 22 subjek perempuan dengan rerata usia  $49,76 \pm 9,52$  tahun. Rerata kadar serum hepsidin sebesar  $18,23 \pm 5,35$  ng/ml. Rerata hasil pengukuran *fibroscan* sebesar  $8,80 \pm 4,53$  kPa dengan pasien terbanyak fibrosis derajat F3 sejumlah 11 orang (32,4%). Didapatkan hubungan yang bermakna dengan kekuatan korelasi kuat antara serum hepsidin dengan fibrosis hati dengan nilai  $r = -0,788$  ( $p < 0,001$ )

**Kesimpulan:** Terdapat hubungan negatif antara kadar serum hepsidin dengan fibrosis hati berdasarkan *fibroscan* pada pasien hepatitis C kronis.

**Kata kunci:** Serum Hepsidin, Fibrosis Hati, Hepatitis C

**ABSTRACT****Correlation Between Hepcidin Serum Levels and Liver Fibrosis Based On  
*Fibroscan* in Patients with Chronic Hepatitis C**

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**Background:** Chronic liver disease caused by hepatitis C virus infection can progress to liver fibrosis, cirrhosis, and hepatocellular carcinoma. Iron overload in chronic hepatitis C is a cofactor that promotes the development of liver damage and increases the risk of liver fibrosis, cirrhosis, and hepatocellular carcinoma. Increased iron in hepatitis C infection is associated with decreased hepcidin serum levels, a major regulator of iron homeostasis. The relationship between hepcidin and liver fibrosis in patients with chronic hepatitis C - drug naive patients is still controversial.

**Objective:** Analyzing correlation between hepcidin serum levels with liver fibrosis based on *fibroscan* in chronic hepatitis C patients in Gastroentero-Hepatology Clinic.

**Material and Methods:** A cross-sectional observational analytic study, involving all hepatitis C patients during July - September 2019. 34 patients fulfilling the inclusion and exclusion criteria were the subjects of the study. Patients were selected with consecutive sampling and were examined for serum hepcidin levels and degree of liver fibrosis was measured by *fibroscan*. Data analysis used spearman correlation test and was considered significant if  $p < 0.05$ .

**Results:** A total of thirty four subjects (64.71% females with the mean age of  $49.76 \pm 9.52$  years) were eligible for enrollment in this study. The average hepcidin level was  $18,23 \pm 5,35$  ng/ml. The average *fibroscan* measurement result was  $8,80 \pm 4,53$  kPa and most patients with stage F3 were 11 peoples (32.4%). The serum hepcidin levels correlated negatively and significantly ( $r = -0,788$ ,  $P < 0.001$ ) with degree of liver fibrosis.

**Conclusion:** There is a negative correlation between hepcidin serum levels and liver fibrosis based on *fibroscan* in patients with chronic hepatitis C.

**Keywords:** Hepcidin Serum, Liver Fibrosis, Hepatitis C