

INTISARI

PERUBAHAN SKOR MODEL OF END STAGE LIVER DISEASE (MELD) PADA PENDERITA SIROSIS HATI YANG MENDAPAT TERAPI SIMVASTATIN 10mg DIBANDING SIMVASTATIN 20mg

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Latar Belakang. Sirosis hati adalah suatu keadaan patologis yang menggambarkan stadium akhir fibrosis hati, berlangsung progresif dan memiliki morbiditas serta mortalitas yang cukup tinggi baik di dunia maupun di Indonesia. Penderita sirosis hati dapat mengalami berbagai komplikasi oleh karena kegagalan fungsi hati dan hipertensi porta. Simvastatin memperbaiki regenerasi sel hati, meningkatkan *nitric oxide* dan disfungsi endotel pada pembuluh darah hati pasien sirosis hati sehingga menurunkan hipertensi porta dan dapat menurunkan tingkat fibrosis serta memperbaiki fungsi sintesisnya. Skor MELD memegang peranan penting dalam membantu menegakkan diagnosis sirosis dan sebagai alat prediksi akurat prognosis pasien sirosis hati pada kesintasan jangka pendek dan menengah.

Tujuan penelitian. Mengetahui perubahan skor MELD pada penderita sirosis hati yang diberikan simvastatin 10 mg dibandingkan 20 mg selama 3 bulan.

Metode. Rancangan penelitian menggunakan uji klinis acak tersamar ganda. Subyek penelitian terdiri dari kelompok yang diberi simvastatin 10mg/hari dan kelompok yang diberi simvastatin 20mg/hari selama 3 bulan. Obat-obat rutin untuk sirosis tetap diberikan sesuai dengan dosis semula. Selama penelitian dilakukan monitoring setiap bulan terhadap kepatuhan konsumsi obat dan efek samping. Analisis data untuk uji statistik dilakukan dengan uji-t, uji *Mann Whitney*, uji *chi-square*, dan uji *repeated measure*.

Hasil penelitian. Sebanyak 38 subyek mengikuti penelitian. Kelompok simvastatin 10 mg (n=21) mengalami penurunan rerata skor MELD sebesar $0,28 \pm 1,71$ ($p=0,542$), sedangkan kelompok simvastatin 20 mg (n=17) terjadi peningkatan tidak bermakna sebesar $0,23 \pm 2,30$ ($p=0,680$). Perubahan skor MELD antara kedua kelompok juga tidak didapatkan perbedaan bermakna ($p=0,429$).

Kesimpulan. Tidak didapatkan penurunan skor MELD secara bermakna pada penderita sirosis hati yang mendapat terapi simvastatin 10 mg/hari dibandingkan dengan simvastatin 20 mg/ hari selama 3 bulan.

Kata kunci: sirosis hati, simvastatin, skor MELD

ABSTRACT

THE ALTERATION OF MODEL OF END STAGE LIVER DISEASE (MELD) SCORE IN LIVER CIRRHOSIS PATIENTS TREATED WITH SIMVASTATIN 10 mg COMPARED TO SIMVASTATIN 20 mg

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Background. Liver cirrhosis is a pathological condition that describes the end stage of hepatic fibrosis, progresses progressively and has a high morbidity and mortality both in the world and in Indonesia. Patients with liver cirrhosis can experience various complications due to liver function failure and portal hypertension. Simvastatin improves liver cell regeneration, endothelial dysfunction in the liver blood vessels and increases nitric oxide in patients with liver cirrhosis, thereby reducing portal hypertension, reduce fibrosis levels and improve its synthesis function. MELD score plays an important role to establish a diagnosis of cirrhosis and as an accurate prognosis predictor of patients with liver cirrhosis in short and medium term survival.

Objective. To examine the change of MELD score in liver cirrhosis patients treated with simvastatin 10 mg compared to simvastatin 20 mg for 3 months.

Methods. A double blind randomized clinical trial study design. Each group treated with simvastatin 10 mg/day or simvastatin 20 mg/day for 3 months. Routine medications for cirrhosis are still given according to previous dose. Monitoring of drug consumption and side effects was observed monthly. Data analysis for statistical tests was applied by t-test, Mann Whitney test, Chi-square test, and repeated measure test.

Result. A total of 38 subjects were included to the study. Simvastatin 10 mg group (n = 21) experienced a decrease in average MELD score of 0.28 ± 1.71 (p = 0.542), while the simvastatin 20 mg group (n = 17) had a non-significant increase of 0.23 ± 2.30 (p = 0.680). The change in MELD score between two groups also found no significant difference (p = 0.429).

Conclusion. There was no significant decrease in MELD scores in patients with liver cirrhosis who received simvastatin 10 mg/day compared to simvastatin 20 mg/day for 3 months.

Keywords: liver cirrhosis, simvastatin, MELD score