

Kadar chemerin darah sebagai prediktor kelainan hati pada anak dengan obesitas = Chemerin as a predictor of liver abnormalities in obese children

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Abstrak

ABSTRAK
Saat ini non-alcoholic fatty liver disease (NAFLD) merupakan penyebab terbanyak dari penyakit kronik hati pada anak dan dewasa. Penelitian terbaru memperlihatkan chemerin yang merupakan salah satu zat yang diproduksi oleh jaringan lemak memiliki andil penting pada NAFLD. Tujuan penelitian ini adalah membandingkan kadar chemerin dalam darah dibandingkan enzim transaminase dalam mendeteksi secara dini kerusakan sel hati karena non alcoholic fatty liver disease (NAFLD) pada anak dengan obesitas. Penelitian deskriptif potong lintang (n=57) dilakukan pada 2 buah sekolah di Jakarta pada anak usia 9-12 tahun dengan obesitas. Anak yang masuk kriteria penelitian dilakukan pemeriksaan ultrasonografi hati untuk mendeteksi perlemakan hati. Kedua kelompok tersebut sama sama dilakukan pemeriksaan kadar enzim transaminase dan chemerin darah. Hasil dari penelitian ini di dapatkan nilai rerata chemerin pada anak yang menderita NAFLD sebesar 96,71 ng/ml sedangkan yang tidak menderita NAFLD sebesar 92,8 ng/ml dengan $P = 0,463$. Hal ini menunjukkan nilai rerata anak dengan NAFLD dibandingkan dengan anak tanpa NAFLD tidak terdapat perbedaan bermakna. Pada penelitian ini didapatkan pula bahwa pemeriksaan chemerin darah memiliki nilai AUC 0,52 dimana nilainya lebih rendah dibandingkan nilai AUC pemeriksaan SGOT dan SGPT yakni 0,81 dan 0,90. Hasil ini menunjukkan bahwa kadar chemerin darah tidak dapat menjadi prediktor yang lebih baik untuk mendeteksi perlemakan hati dibandingkan pemeriksaan kadar SGOT dan SGPT pada penelitian ini. Manfaat chemerin sebagai prediktor kelainan hati pada anak dengan obesitas perlu diteliti lebih lanjut.

ABSTRACT
Non-alcoholic fatty liver disease (NAFLD) is currently the most common cause of chronic liver disease in both adults and children. Current studies have shown that chemerin, one of the biologically active substance produced by fat tissue, may have an important role in the progression of NAFLD. The aim of this research was to study whether chemerin is able to predict liver abnormalities due to NAFLD in obese children better than serum transaminases. A cross-sectional descriptive study was conducted in 57 obese subjects 9-12 years of age at 2 elementary schools in Jakarta, Indonesia. Liver ultrasound was performed in eligible subjects to detect fatty liver, along with serum chemerin and serum transaminase tests. Mean chemerin level in NAFLD and non-NAFLD children were 96.71 ng/mL and 92.8 ng/mL ($p=0.463$), showing no significant difference between serum chemerin level in the NAFLD and non-NAFLD group. The area under the curve (AUC) for serum chemerin was 0.52, lower than the AUC for AST (0.81) and AST (0.90). This shows that serum chemerin is not superior in predicting fatty liver compared to serum transaminase levels in this study. The role of chemerin as a marker to predict liver abnormalities in obese children still needs to be further investigated.;Non-alcoholic fatty liver disease (NAFLD) is currently the most common cause of chronic liver disease in both adults and children. Current studies have shown that chemerin, one of the biologically active substance produced by fat tissue, may have an important role in the progression of NAFLD. The aim of this research was to study whether chemerin is able to predict liver abnormalities due to NAFLD in obese children better than serum transaminases. A cross-sectional descriptive study was conducted in 57 obese

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