Penentuan titik potong optimal kadar serum Retinol Binding Protein-4 untuk memprediksi risiko kejadian resistensi insulin pada sindrom ovarium poli kistik dengan indeks masa tubuh normal = Serum Retinol Binding Protein-4 cut off level to predict the risk of insulin resistance on polycystic ovarian syndrome with normal body mass index

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Abstrak

ABSTRAK
 Latar Belakang: Sindrom Ovarium Polikistik (SOPK) merupakan penyebab 40% infertilitas pada wanita usia reproduksi. Resistensi insulin sebagai salah satu patofisiolofi yang mendasari SOPK, berkaitan erat dengan jaringan adiposa viseral dan ditemukan pada 30-50% pasien SOPK dengan indeks masa tubuh normal serta lingkar pinggang kurang dari 80 cm. Retinol Binding Protein-4 (RBP-4) yang disekresi oleh jaringan adiposa viseral diketahui sebagai salah satu adipokin yang menyebabkan resistensi insulin. Pengukuran IMT dan lingkar pinggang tidak dapat mewakili akumulasi jaringan adiposa viseral pada SOPK dengan IMT normal serta lingkar pinggang kurang dari 80 cm. Dengan diketahuinya titik potong optimal kadar serum RBP-4 sebagai penanda jaringan adiposa viseral, diharapkan dapat memprediksi risiko kejadian resistensi insulin yang bermanfaat dalam menentukan penatalaksanaan kasus SOPK dengan IMT normal terkait strategi pengurangan akumulasi jaringan adiposa viseral.
Tujuan: Diketahuinya titik potong optimal kadar serum RBP-4 sebagai penanda jaringan adiposa viseral untuk memprediksi risiko kejadian resistensi insulin pada penderita SOPK dengan IMT normal.
Metode: Studi observasional dengan desain potong lintang selama periode Juli 2014 hingga Maret 2015 di Poliklinik Yasmin, RSCM, Jakarta.
Hasil: Sejumlah 40 subjek SOPK dengan IMT normal yang memenuhi kriteria inklusi didapatkan 16 subjek (40%) yang mengalami resistensi insulin dan 24 subjek (60%) nir resistensi insulin. Sejumlah 23 subjek (57.5%) memiliki lingkar pinggang kurang dari 80 cm, dimana 6 subjek (26%) diantaranya mengalami resistensi insulin. Kadar serum RBP-4 pada kelompok resistensi insulin bermakna lebih tinggi dibandingkan nir resistensi insulin (p 0.008). Dengan analisis ROC didapatkan AUC kadar serum RBP-4 78.8% (IK 95% -8445.59 ? -1447.98) dengan nilai p 0.002. Titik potong optimal kadar serum RBP-4 adalah 24133 ng/mL dengan sensitivitas sebesar 75% dan spesifisitas sebesar 75%. Dengan analisis regresi logistik biner didapatkan pemeriksaan serum RBP-4 menambah nilai diagnostik dari parameter demografis dan klinis AUC 85.7% menjadi 91.1%.
Kesimpulan: Kadar serum RBP-4 sebagai penanda jaringan adiposa viseral dapat digunakan untuk memprediksi risiko kejadian resistensi insulin pada penderita SOPK dengan IMT normal.
ABSTRACT Background: Polycystic ovarian syndrome (PCOS) contributes to fourty percent

of infertility?s issues on reproductive women. Insulin resistance as one of important pathophysiology in PCOS, correlates with visceral adipose tissue and is found on 30-50% PCOS patients with normal body mass index and waist circumference less than 80 cm. Retinol Binding Protein-4 (RBP-4), which is secreted by visceral adipose tissue, known as one of adipokines that cause insulin resistance. The measurement of body mass index and waist circumference could not represent visceral adiposity on PCOS with normal body mass index and waist circumference less than 80 cm. Determination of serum RBP-4 cut off level as visceral adipose tissue marker hopefully could predict the risk of insulin resistance on polycystic ovarian syndrome with normal body mass index, therefore it will be useful on its management related to reduction of visceral adiposity.

Objective: To obtain serum RBP-4 cut off level as visceral adipose tissue marker to predict the risk of insulin resistance on PCOS with normal body mass index.

Method: This was an observational study with cross sectional design conducted at Yasmin Clinic, RSCM, Jakarta during a period of July 2014 until March 2015.

Result: Fourty PCOS patients with normal body mass index were participated on this study. There were 16 subjects (40%) who were insulin resistance and 24 subjects (60%) who were not insulin resistance. There were 23 subjects (57.5%) who had waist circumference less than 80 cm, where 6 of them (26%) were insulim resistance. Serum RBP-4 level was significantly higher on insulin resistance group (p 0.008). After ROC analysis was performed, AUC of serum RBP-4 was 78.8% (CI 95% -8445.59 ? -1447.98, p 0.002). The cut off level of serum RBP-4 was 24133 ng/mL with sensitivity 75% and specificity 75%. After logistic regression analysis was performed, it was found that serum RBP-4 increase diagnostic value of demographic and clinical parameter with AUC 85.7% to 91.1%. ;Background: Polycystic ovarian syndrome (PCOS) contributes to fourty percent
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