

INTISARI

Latar belakang: Prevalensi status gizi berlebih dan obesitas pada usia anak-anak dan remaja mengalami peningkatan dalam satu dekade terakhir. Prevalensi status gizi gemuk di Indonesia sebesar 8% dan sebesar 6,81% di Provinsi DI Yogyakarta. Obesitas meningkatkan risiko terjadinya sindrom metabolik, kondisi ini dapat berlanjut hingga usia dewasa, serta meningkatkan risiko penyakit kronik, seperti diabetes melitus, perlemakan hati, *obstructive sleep apnea*, penyakit kardiovaskular, dan sindrom ovarium polikistik, yang akan meningkatkan morbiditas dan mortalitas, serta menurunkan kualitas hidup penderitanya. Upaya pencegahan sindrom metabolik pada anak obesitas perlu dilakukan, salah satunya dengan mengetahui berbagai risiko dari sindrom metabolik untuk menghindari luaran buruk dari kedua entitas tersebut.

Tujuan: Mengetahui faktor-faktor risiko terjadinya sindrom metabolik pada anak obesitas dan mengetahui perbedaan jumlah kasus yang terdiagnosis sindrom metabolik berdasarkan kriteria diagnosis IDAI dan IDF.

Metode: Dilakukan studi kasus kontrol dengan sampel anak obesitas 10-18 tahun yang berobat ke Instalasi Kesehatan Anak RSUP Dr. Sardjito Yogyakarta periode Januari 2017- Desember 2022. Subjek kasus diambil secara *total sampling*. Dari subjek penelitian dikumpulkan data riwayat penyakit keluarga diabetes melitus tipe 2 dan/atau penyakit kardiovaskular, ibu dengan diabetes melitus gestasional, riwayat lahir kecil masa kehamilan, dan pemberian ASI eksklusif. Regresi logistik dilakukan untuk menguji hubungan antara variabel bebas dengan sindrom metabolik.

Hasil: Total 132 subjek penelitian terdiri dari kelompok kasus 69 anak obesitas dengan sindrom metabolik dan kelompok kontrol sebanyak 63 anak obesitas tanpa sindrom metabolik. Prevalensi sindrom metabolik yaitu Analisis bivariat dan multivariat menunjukkan riwayat keluarga diabetes melitus tipe 2 dan/atau penyakit kardiovaskular meningkatkan risiko terjadinya sindrom metabolik (p 0,022; OR 2,308; IK 95% 1,129-4,717). Jumlah kasus sindrom metabolik yang terdiagnosis berdasarkan kriteria IDAI sebanyak 69 kasus, sedangkan berdasarkan kriteria IDF didapatkan 45 kasus. *Agreement* kasus sindrom metabolik negatif sebesar 100%, sedangkan sensitifitas atau *agreement* kasus sindrom metabolik positif sebesar 65%.

Kesimpulan: Riwayat keluarga diabetes melitus tipe 2 dan/atau penyakit kardiovaskular merupakan risiko terjadinya sindrom metabolik pada anak dengan obesitas

Kata kunci: Obesitas, sindrom metabolik, riwayat keluarga diabetes melitus tipe 2 dan/atau penyakit kardiovaskular, faktor risiko.

ABSTRACT

Background: The prevalence of overweight and obesity in children and adolescents has increased in the last decade. Obesity increases the risk of metabolic syndrome, this condition can continue into adulthood, and increases the risk of chronic diseases, such as diabetes mellitus, fatty liver, obstructive sleep apnea, cardiovascular disease, and polycystic ovary syndrome, which will increase morbidity and mortality, and reduce quality of life. the sufferer's life. Efforts to prevent metabolic syndrome in obese children need to be done, one of which is by knowing the various risks of metabolic syndrome to avoid bad outcomes from these two entities.

Objectives: To determine the risk factors for metabolic syndrome in obese children and to determine differences in the number of cases diagnosed with metabolic syndrome based on IDAI and IDF diagnostic criteria

Methods: A case-control study was conducted with a sample of obese children aged 10-18 years who were treated at the Children's Health Installation at RSUP Dr. Sardjito Yogyakarta for the period January 2017- December 2022. Case subjects were taken by total sampling. From the research subjects, data were collected on family history of type 2 diabetes mellitus and/or cardiovascular disease, mothers with gestational diabetes mellitus, history of small births during pregnancy, and exclusive breastfeeding. Logistic regression was performed to examine the relationship between the independent variables and the metabolic syndrome.

Results: A total of 132 study subjects consisted of a case group of 69 obese children with metabolic syndrome and a control group of 63 obese children without metabolic syndrome. Prevalence of metabolic syndrome, namely bivariate and multivariate analysis showed that a family history of type 2 diabetes mellitus and/or cardiovascular disease increased the risk of developing metabolic syndrome (p 0.022; OR 2.308; 95% CI 1.129-4.717). The number of cases of metabolic syndrome diagnosed based on IDAI criteria was 69 cases, while based on IDF criteria were 45 cases. Agreement on negative metabolic syndrome cases is 100%, while the sensitivity or agreement on positive metabolic syndrome cases is 65%.

Conclusion: Family history of type 2 diabetes mellitus and/or cardiovascular disease is a risk factor for metabolic syndrome in children with obesity.

Keywords: Obesity, metabolic syndrome, family history of type 2 diabetes mellitus and/or cardiovascular disease, risk factors