

INTISARI

Latar Belakang

Bayi dari ibu diabetes mengalami morbiditas dan mortalitas kardiovaskular yang cukup tinggi. Kurang diketahui masalah kardiovaskular pada bayi dari ibu diabetes di Indonesia untuk memungkinkan intervensi.

Tujuan

Mengetahui masalah kardiovaskuler dan faktor-faktor yang berhubungan dengan penyakit jantung bawaan pada bayi dari ibu diabetik di RSUP Dr. Sardjito Yogyakarta.

Metode

Sebuah studi kohort retrospektif dilakukan dengan menggunakan rekam medis pasien dari Rumah Sakit Dr. Sardjito, Yogyakarta, Indonesia, berusia kurang dari 18 tahun dengan ibu diabetes antara 1 April 2016 sampai 31 Desember 2022. Jenis kelamin, berat lahir, usia kehamilan, jenis persalinan, rujukan status, jenis diabetes (diabetes gestasional atau pra-kehamilan), jenis masalah kardiovaskular termasuk penyakit jantung bawaan (PJB), kardiomiopati, hipertensi pulmonal dan kematian dicatat. Regresi logistik digunakan untuk mengidentifikasi prediktor independen untuk penyakit jantung bawaan.

Hasil

Sebanyak 215 pasien anak dengan ibu diabetes direkrut selama masa studi, 49 (22,8%) di antaranya adalah diabetes pregestasional. Dari jumlah tersebut, 150 (69,7%) memiliki masalah kardiovaskular termasuk 129 (60%) didiagnosis sebagai PJB, 10 (4,7%) anak dengan ibu diabetes mengalami penebalan septum interventrikular dan kardiomiopati hipertrofi, dan 11 (5,1%) memiliki hipertensi pulmonal persisten dari bayi baru lahir. Analisis bivariat mengidentifikasi bahwa sindrom berhubungan dengan peningkatan risiko PJK pada anak dengan ibu diabetes dengan rasio odds 4,707 (95% Confidence interval 1,035-21,413).

Kesimpulan

Studi ini membuktikan masalah kardiovaskular pada anak dengan ibu diabetes adalah signifikan. Sindrom dikaitkan dengan peningkatan empat kali lipat risiko PJB pada anak-anak dengan ibu diabetes.

ABSTRACT

Background

Infants of diabetic mothers have experienced a considerable cardiovascular morbidity and mortality. Less is known the cardiovascular problems in infant of diabetic mothers in Indonesia to allow intervention.

Objective

To determine the cardiovascular problems and factors associated with congenital heart disease in infant of diabetic mothers in RSUP Dr. Sardjito, Yogyakarta.

Methods

A retrospective cohort study was conducted using medical records of patients from Dr. Sardjito Hospital, Yogyakarta, Indonesia, aged less than 18 with diabetic mothers between 1st April 2016 until 31 October 2022. Sex, birth weight, gestational age, type of delivery, referral status, type of diabetes (gestational or pre-gestational diabetes), type of cardiovascular problems including congenital heart disease (CHD), cardiomyopathy, pulmonary hypertension and mortality were recorded. Logistic regression was used to identify independent predictors for congenital heart disease.

Results

A total of 215 pediatric patients with diabetic mother were recruited during the study period, 49 (22.8%) of whom were pregestational diabetes. Of those, 150 (69.7%) had cardiovascular problems including 129 (60%) were diagnosed as CHD, 10 (4.7%) children with diabetic mothers had thickened interventricular septum and hypertrophy cardiomyopathy, and 11 (5.1%) had persistent pulmonary hypertension of the newborn. Bivariate analysis identified that syndrome was associated with an increase in the risk of CHD in children with diabetic mother with odds ratio of 4.707 (95% Confidence interval 1.035-21.413).

Conclusion

This study proves cardiovascular problems among children with diabetic mother was significant. Syndrome was associated with a four-fold increase in the risk of CHD in children with diabetic mother.